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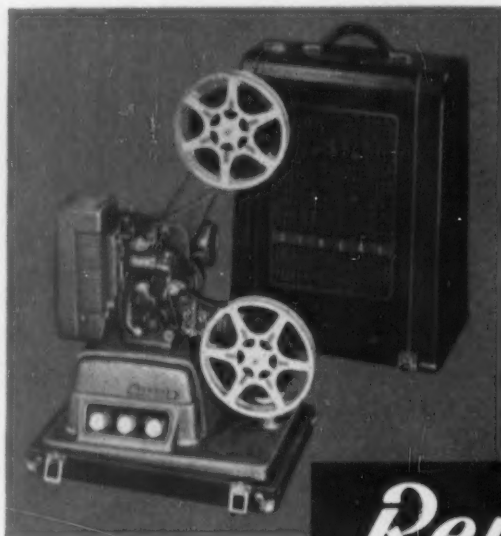
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MAIDA R. DAVIS, Assistant Editor

Educational Commentator  
EDGAR W. KNIGHT  
Professor of Education  
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Contents of this issue are listed in Education Index

# OUR ROAD TO FREEDOM

It is crucially important that democracy itself be vigilantly guarded in the process of excluding traitors of truth

**M**ANY laws have been passed requiring teachers to declare under oath that they are not communists and that they do not belong to any group organized to overthrow the government. I doubt whether such



By **EARL JAMES McGRATH**  
Guest Educational Commentator  
Dr. McGrath is the  
U. S. Commissioner of Education,  
Federal Security Agency

EDITOR'S NOTE—Last month Dr. E. W. Knight's editorial questioned the value of loyalty oaths. These remarks at the Boston NEA meeting, shed more light on that much-discussed subject.

legal procedures are an effective safeguard against the teaching of communism in our schools. Any teacher loyal to the United States and its way of life would be loyal without signing such a statement and to achieve their evil objectives those who are disloyal will not hesitate to add perjury to treason. The requirement that teachers sign loyalty oaths is, therefore, a public policy of doubtful effectiveness. It creates a sense of false security by leading the public to believe that the problem has been solved, when in fact it may merely have been buried from public view.

I understand, too, and I share the resentment of educators at the implication that teachers are less loyal than other Americans. We educators know that no occupational group is composed of more loyal, dependable, devoted Americans than is our own. The loyalty of the teaching profession does not wait on some loyalty test or the taking of an oath. It is a matter of history written into the record.

I believe we should be willing and ready to sign loyalty oaths if present pressures of public opinion require them. Organized opposition to loyalty oaths places the profession in a questionable position with the public. It imposes a heavy burden of explanation when its energies are needed to promote democratic values and practices rather than to fight a rearguard action.

## But Why Refuse?

Refusal to sign the loyalty oaths where they are requested weakens the claims of teachers to their right to teach the full truth freely. Academic freedom and the liberties of law can best be maintained by men and women who enjoy the full confidence of a free society. If public opinion demands loyalty oaths, then the signing of such oaths places the teaching profession in a more solid position to attack the enemies of democracy from without and also from within.

It then becomes a primary responsibility of the profession to educate the general public, both inside and outside the schools and colleges, as to the true meanings of totalitarianism. The greatest danger to the future of education in

America, and to the American way of life, is that in our efforts to avoid the spread of communistic doctrines we may turn this nation into a police state, with many of the traits we abhor in totalitarianism. The freedoms guaranteed

under the Constitution are indispensable to a free society. Implicit in these freedoms is the freedom of teaching.

Only as teachers have the right, and exercise the responsibility, to present the truth as they see it; and only as they cultivate habits of free inquiry on any subject, will they fulfill their proper mission in a democracy. Any action of the public which interferes with this freedom in the classroom will tend to intimidate many teachers and thus destroy their effectiveness. Many strong and intellectually enterprising teachers would leave the profession. It will stultify education, dull the minds of students, and if continued, such a practice will make education the tool of a thought control no less vicious than that of other totalitarian states.

## Limited, It's Mockery

The strongest internal defense of democracy lies precisely in a teaching profession whose loyalty to democracy is unquestioned—so completely unquestioned that what is considered false doctrine may also be freely discussed in the classroom. The members of the teaching profession have, therefore, a moral responsibility to defend their right to discuss unpopular subjects and to bring to bear on these subjects such evidence as is available. If this freedom of teaching is brought into question or limited through outside pressures, teaching will become a mockery. It will be indoctrination of dogmas; the American classroom will be indistinguishable from the totalitarian classroom in which everyone must think and act alike.

To defend the right to teach the truth through free inquiry, even in unpopular directions, will not be easy. Loyalty to the highest ideals of the profession and to the democratic way of life nevertheless requires that we do just this thing. Indeed, this is the proof of our loyalty—not in an oath, but in the performance of the courageous task of teaching the truth

freely according to the dictates of our conscience.

One of many examples of the kind of courage needed in the teaching profession, if it is to demonstrate its loyalty to freedom, is teaching about commu-

(Turn to page 10)

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Cameras are machines for making good impressions. Here photography students and a girl who seems to be interested in other subjects look over some newer cameras

**P**HOTOGRAPHIC instruction is offered in 22 Detroit high schools. It may be studied in the classroom with appropriate laboratory experience for which the student receives academic credit. Some schools offer it as extracurricular work through camera clubs and as an adjunct to field work. Other high schools teach photography as a part of the course in art, and physics, and chemistry. Detroit's evening curriculum for adults includes photography for beginners and more advanced work for those interested in commercial photography.

The subject is found to have esthetic appeal and to offer creative outlet for the leisure hours. For a few students, it serves as the inspiration and the "trial flight" for a wage-earning career. For all, it offers a promise of personal satisfaction that comes with the know-how of taking pictures and of judging the product of other people's cameras. Photography helps make constructive critics and gives each student a sense of accomplishment over that of the amateur who revels in the "head-on" pictures of Grandma and Uncle Ezra.

Just what does the course include as it is offered in a number of Detroit's high schools? Perhaps one illustration will suffice. At Detroit Denby High School, with an enrollment of nearly 4,000 students, the course is taught as an art. In the words of Irma Webber, one of the school's photography teachers, it constitutes the "individual's interpretation of life's emotions whether for joy, decoration, or commerce."

The aim of the course is to apply the student's knowledge in a practical way. First, it concerns an awareness of things around him—a pattern of a leaf, or arrangement of food upon a table. It is concerned with use of the

commonplace. The student photographer soon learns that the man behind the machine will say it in a different way, with, perhaps, unusual composition. The student is educated to the point where he develops a feeling that photography is a problem in design and must be approached in the same manner as an artist plans a painting. The student is taught to first plan, then compose and analyze, finally discard or adjust, and at last record in permanent

form that which is artistic and tells a story.

Who may enroll? Any student who owns a camera. There is no grade placement. Beginning photography classes include students from 9A to 12A. The subject of the camera as a machine is explained; how to hold and load; how to take pictures indoors; the use of floodlights; the mixing of chemicals; the development of film; the making of contact prints; and finally, washing and drying of

## DETROIT HIGH SCHOOLS MAKE PHOTOGRAPHIC INSTRUCTION AVAILABLE TO ALL

**The 17 academic high schools and five vocational schools offer courses or club work in the subject**

**By OTIS A. CROSBY**

Senior Administrative Assistant, Department of Information Service, Detroit Public Schools





Students of photography at Denby High School are practicing on a model from the class. Plus X film, 1/12 at f5.6



Students learn to mix chemicals and to control temperatures. Picture by a student on Plus X film, 1/25 at f4.5



Tray development for roll film is here being learned by a part of the class who want to know every step

prints. One class period a week is given to outdoor shooting on the school grounds.

More advanced photography is open to students who have earned credit in the first course. The work is centered on enlarging. This includes methods of dodging, burning in, and print control. Various work on lighting and posing the model is included in this course. Some still life or table-top photography is offered on an experimental basis. Outdoor snap shooting is encouraged but class time is not permitted for this experience. Two-and-a-half hours of credit are given for this work. Members of this class carry press passes which admit them to school activities and permit their photographing such events.

Additional photography courses offer continuation of enlarging and experimentation with various chemicals and papers. These courses also include exploration of photography in such phases as individual students care to take up. There are class demonstrations in toning, retouching, and oil and water coloring of prints. The advance classes assume all assignments for the school newspaper and the school yearbook. Illustrative of these assignments are formal group pictures of athletic teams, also action shots of games, school dances, concerts, plays, and the like.

The old adage that practice makes perfect is soon recognized by the students as being fallacious unless the practitioner has the advantage of proper instruction. As a result, the class submits to print criticism, both of the student's work and of outstanding work from

outside the class, particularly from photography magazines and books. This criticism is a part of each week's work.

No student of photography can get beyond his first print before he learns that the good photographer must also be a good artist. He must know harmony, symmetry, color combination, and he must learn to be a diplomat. If "the people's choice" is not a good-looking young lady, he must learn how to place her where she is less conspicuous and yet keep within the good graces of the group. He soon comes to know that he is expected to make a good-looking individual out of an "also-ran." He learns that pictures do not wait in many instances, and that it is easier to throw away than to make arrangements for a retake. These facts become a part of the knowledge of the student in Detroit's photography classes.

Just what are the limitations? No one in Detroit's schools will venture an answer. Probably it lies within the imagination of the teacher and the modernity of thought of the school's administrative staff. Even as a sideline, students are coming to realize that employers oftentimes pick individuals from the employment line largely on the basis of their avocations, of which photography is one.

It has proved extremely popular with the student body. With supplies and equipment becoming more available at reasonable prices, and with the public's acknowledgment of its obligation to finance schools adequately, there is good reason to believe that photography may undergo substantial growth in the school curriculum in the immediate future.



Matching the paper to the negative is important for best results, as this student learns after experimentation



Print criticism is in effect examination day for the photography class. It comes once a week and is welcomed



No doubt about it, camping does add to self-reliance



"Come and get it!" Mess hall is located on the lake



Originally for work experience, Palomar is a junior camp

## SAN DIEGO'S YEAR-ROUND SCHOOL CAMPS

**C**UYAMACA AND PALOMAR. Those are the names of the two successful, all-year school camps operated by the San Diego City and County Boards of Education.

Both camps are operated as community recreation projects in the summer, and Cuyamaca is also used many a weekend by educational groups for professional conferences. This summer a two-week music encampment was held there, with 100 boys and girls taking music lessons out of doors each week.

A City-County Camp Commission consisting of educators, government officials, and parent-teacher representatives was formed late

**These projects give pupils  
many experiences in  
truly democratic living**

in 1945. Plans for a camp were perfected, facilities readied, a curriculum worked out, and a staff organized.

In March, 1946, the first group of 71 sixth-grade pupils arrived for a week's stay at Camp Cuyamaca in Cuyamaca Rancho State Park.

The idea of camping developed from the realization that city children, for the most part, seldom grow up to have the well-rounded experience which outdoor living affords.

Camping was conceived of as an educational experience. Children need attitudes that derive from group living. They need to gain self-reliance and the knowledge that they have the ability to do things for themselves in daily living. The wholesome enjoyments that come from experiences of nature, its trees, wild life, and its grand aspect provide worth-while leisure activity.

At Camp Cuyamaca for (Turn to page 10)

Packing to go home after a happy trip to Cuyamaca



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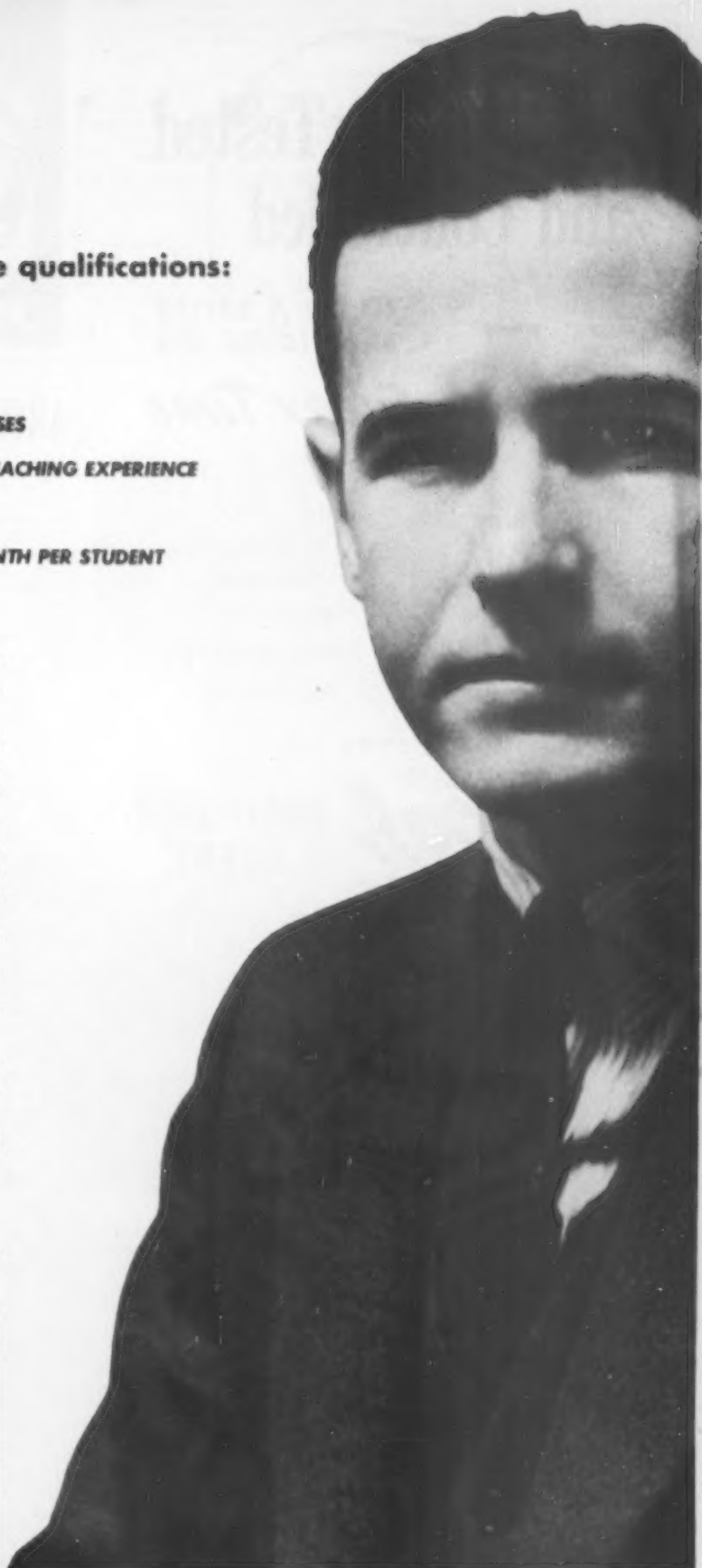
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## USES OF ROCCAL

**CAFETERIAS:** To sanitize eating, drinking, cooking utensils and equipment.

**WASH ROOMS:** To sanitize wash bowls, toilets, urinals, for floors and walls.

**GYMNASIUMS:** To sanitize all equipment, floors and walls. Use also on lockers and benches.

**SHOWER ROOMS:** To sanitize all equipment, floors and walls.

**SWIMMING POOLS:** To sanitize equipment, multiple-use bathing suits, floors and walls. Use also as a foot bath to prevent disease transmission. In the pool water, it controls the growth of algae.

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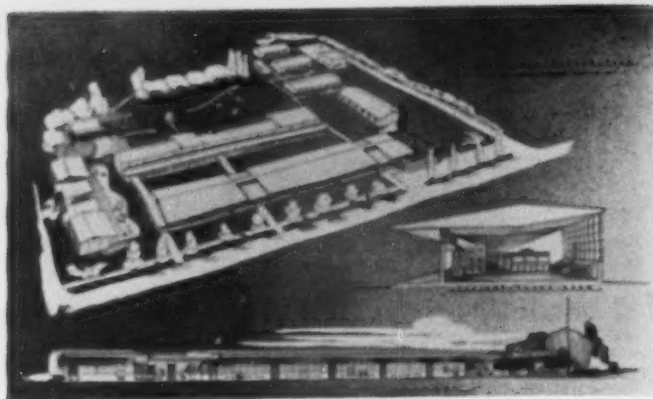
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Bird's-eye perspective and cross section of typical classroom of the Ivanhoe School

## ARCHITECTS PERFECT ECONOMY MEASURE

**S**CHOOLS faced with the problem of immediate expansion under reduced budgets will be cheered by news of a new system of roof construction developed by California architects.

Increasingly heavy influx of population into certain areas of California, where large portions of the land are either tax free or barren, left school boards no alternative but to look for outside aid after their bonding capacity and tax rates had reached the allowable maximums. Even state response has proved inadequate in some cases to provide enough aid for anything but "austerity programs."

One of the principal and most satisfactory economies developed under these necessity-mothered conditions is a new system of roof construction that replaces heavy wooden beams with light steel trusses.

As illustrated in the accompanying sketch from the offices of Los Angeles' architects William Glenn Balch and Louis L. Bryan, the light steel trusses were placed at four-foot centers and supported on steel pipe columns embedded in short concrete walls.

The high cost per carpenter labor was the element that originally sent the California architects looking for a new approach to roof construction. In this case the variable between carpenter cost per hour (\$2.1125) as opposed to steel worker cost per hour (\$2) was not nearly as important as the fact that the steel worker was able to produce so much faster. The carpenter must examine each piece of wood, since no two are exactly alike,

and the time consumed in readying each piece of wood for joining, plus the time for nailing and bolting far exceeds the time used by the steel worker who welds each joint as securely as the original cast.

Because of the exact uniformity of the trusses, the steel workers are able to join elements on an assembly line scale at a fraction of the time used by carpenters, and any comparison of the joints produced by welding versus nailing gives the welder undisputed favor.

Other economies and advantages that recommend the operation as preferred by Balch and Bryan are:

1. The structural steel material required is readily available, consumes less shipping or trucking space.

2. Any small steel shop can fabricate the work.

3. The structure is free of the deterioration that attacks wood.

4. Elimination of arcade footings and columns needed by wood means further important savings.

5. Maximum natural lighting is provided.

6. Classroom partitions may be moved or altered without alterations to the structural elements.

In the accompanying sketches of the Ivanhoe School (in Tulare County 10 miles north of Visalia in the San Joaquin Valley) 2" x 4" wood purlins with diagonal wood sheathing complete the roof; and 2" x 4" ceiling joists support acoustical tile and plaster on the under side. (The purlins are supporting members that span between truss elements and eliminate use of roof rafters.)

## Should There Be More "Temporary" Buildings?

**T**ULSA, Oklahoma; Ft. Worth, Texas; Seattle, Washington; Baker Field, San Diego; and Los Angeles, California, are successfully using certain types of transportable buildings suitable to the respective climates and school situations. It was reported at the last ASBO Convention round table on financing new school construction.

One conclusion was that transportable buildings were well received by the community when the buildings were built according to reasonable school housing standards and kept in a first-class, attractive status. There is some danger, however, that if these buildings are constructed well, the temporary or transportable type might become permanent.

The length of time a school building should last was also an important consideration. Since many buildings have become obsolete and inadequate in thirty to

thirty-five years, the question of "Why invest so much money in the more durable types?" was seriously considered.

Various plans of pay for construction were discussed. Some states such as California, Washington, and Massachusetts reported better state aid for the construction of school buildings. Several systems were using the pay-as-you-go plan, others the borrowing methods, and some were using a combination of the two plans.

Methods of reporting building costs were discussed. Should costs be determined by cubic measure, square-foot measure, classroom units, or some other method? Several costs ranging from 40¢ to \$200 per cubic foot were mentioned, which seemed meaningless to the participants unless the buildings constructed were more carefully defined. . . . Reported by N. L. George, business manager, Oklahoma City Schools.

## Andrew D. Holt Is New NEA Head

**N**EWLY elected president of the NEA is Dr. Andrew D. Holt, executive secretary of the Tennessee Education Association.



At the well-attended summer meeting in Boston, total membership of the NEA for 1948-49 was reported as 427,527.

Of outstanding general interest among the 14 resolutions passed by the association were the one dealing

with preservation of democracy and that dealing with federal aid to education.

In the first resolution, the NEA went on record as opposing members of the Communist Party in the American public schools. "Such membership involves adherence to doctrines and discipline completely inconsistent with the principles of freedom on which American education depends. Such membership and the accompanying surrender of intellectual integrity render an individual unfit to discharge the duties of a teacher in this country," stated the resolution.

Wisely the association condemned the careless, incorrect, and unjust use of such words as "red" and "communist" to attack teachers and other persons whose views merely differ from those of their accusers.

In urging Congress to take early favorable action on federal aid to education, the NEA cautioned that the aid should be given without federal control. It recommended also that federal funds be made available for public school housing, to be distributed through regular, constituted, state educational agencies.

## Include a Consumer Course in High School

By ALVIN W. MUSORAVE

Condensed from *The Texas Outlook*

**A** COURSE which might be called "basic business education," to teach students how to be wise consumers, is definitely needed in the business education curriculum of high schools today. Not all high-school students need to learn shorthand, but all of them will make use of a knowledge of sound consumer economics.

In general, the commercial curricula of our high schools can be improved by three main departures from conventional and traditional procedure. They can:

1. Place less emphasis on skilled subjects, such as shorthand and typing. Business skills such as these have been emphasized far out of proportion to their importance. Such skills are not worth much unless well developed.

If a school is too small to be sufficiently staffed for sound teaching of these skills, it is well to replace the courses with other business subjects with more universal appeal to students.

2. Offer training in the distributive fields. Many students who are prepared for clerical or stenographic work go directly into sales work when graduated.

A list of subjects related to the distributive field includes: salesmanship, retailing, advertising, business law, general business training, commercial geography, business economics, and other specialized business administration subjects.

3. Give more attention to phases of general education inherent in business subjects. Certain facts about business

should be a part of every student's education. Sometimes this information is incorporated as part of a junior business or general business training course.

Subjects particularly desirable along these lines are bookkeeping, junior business training, business arithmetic, and business law.

Typewriting is an essential subject if it can be properly taught and is not emphasized to the exclusion of other important courses. The teaching of

typing requires a suitable classroom and qualified teachers. In shorthand, it should be recognized that the main purpose is to train students to use this skill efficiently.

A survey of business subjects taught in high schools throughout the country reveals the following as among separate courses offered: typewriting, bookkeeping, shorthand, business law, junior training, business arithmetic, office practice, commercial geography, salesmanship, sec-

retorial training, business English, retailing, advertising, business economics, business machines, consumer education, penmanship, banking, filing, occupations, and short unit courses in miscellaneous business subjects.

The foregoing list shows that there is no uniformity of courses. Consequently, the need is apparent for business teachers and school administrators to consider the problem of fitting a commercial curriculum to present-day needs.

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## High Schools Are Doing Too Limited a Job

**O**UR high schools are for the most part not preparing their students to solve the problems they will face after graduation, in the view of Francis T. Spaulding, New York's education commissioner, in the *Ladies' Home Journal*.

Though they are turning out boys and girls who are more or less proficient in academic subject matter, who have learned to get along well with one

another, and who think that schooling is a good thing, this is not enough. Plenty of high schools—with the backing of their communities—have proved it is possible to go far beyond mere academic proficiency.

Students, he believes, must be given the chance to consider problems for which their towns, their states, and the nation are seeking solutions—how to

provide decent housing for millions who lack it, how to keep workers' pay in line with the cost of living. Students who face these problems as adults face them thereby gain maturity.

This, he says, "will mean providing them firsthand experience in the kind of democratic citizenship that will be open to them as adults, by making them responsible for managing more and more of their school affairs, and by encouraging them to take active part, even

though they lack the vote, in getting desirable things done in their communities.

Dr. Spaulding suggests that our system of rating student performance is due for an overhauling. School marks, or the ability to get through courses, are significant only as they have a bearing on what boys and girls are likely to do when they come up against the test of living outside of school.

In short, the most meaningful measure of a school's effectiveness is how its graduates behave outside of school as citizens, workers, members of families, and as decent, self-respecting persons.

SM-5B

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## G-E LAMPS

# GENERAL ELECTRIC

## The Road To Freedom

(Continued from page 3)

nism itself. Notice, I do not say, the teaching of communism; I say teaching about communism. Now, in many communities and colleges, the teacher who mentions Karl Marx or communism will be suspected of disloyalty. But unless communism is discussed in the schools, there is no way to insure a full understanding of the differences between it and democracy. As well expect children to keep away from poison ivy without knowing what it looks like!

Ignorance is no protection against totalitarianism—particularly when totalitarianism masquerades in democratic phrases and front. Students must be taught to detect the subtle arguments of totalitarianism and to expose their fallacies. The American child who leaves school without an understanding of the purpose, programs, and practices of communism is unprepared for life in a democracy. To guard against dangers to himself and to his society, he must know how to meet error with truth; and he must never commit the mistake of labeling nonconformity and dissent with the odious and libelous labels of totalitarianism.

All of this means that curriculum material must be planned and used, comparing and contrasting democracy and totalitarianism. We do not have available, in usable form for all levels of education, documentary materials showing the full meaning of liberty as contrasted with totalitarianism. I believe confidently that the day-to-day comparison of life under totalitarian regimes and under democratic procedures, coupled with fuller experience of democracy itself in our schools, is the best protection against subversive propaganda.

A love and devotion to the best in American life will grow only in the minds and hearts of those who know full well what the alternatives are, and who, in their own lives, have entered fully into the experience of democracy. In the end, this is our only protection.

## San Diego's Year Round School Camps

(Continued from page 6)

elementary school children, camp period of one week replaces one week of normal classroom work. Teachers accompany their classes to camp, but a permanent staff assumes responsibility for camp activities. Pupils study forestry and Indian lore. They enjoy hikes, sleep-outs, and campfires.

The success of Camp Cuyamaca for elementary school children led to plans for a camping program for high-school pupils. Twenty acres of the Palomar State Park were leased to develop a work-experience camp for high-school boys. Camp Palomar, opened in January, 1947. Its administration building burned down and the camp was reopened last March. Boys and girls have separate encampments on alter-



nate half-weeks, each encampment consisting of two and a half days.

Now that Palomar is a finished product, the work experience encampments have been discontinued. Instead, junior high school classes encamp there and take the opportunity of studying at firsthand the world-famous Palomar Observatory.

The entire day at Palomar Camp is given over to camping activity, outdoor living and experience. In addition to participating in the specially scheduled trips to Palomar Observatory, the youngsters study weather conditions, using the facilities of a nearby U. S. Weather Station. They also study conservation, wild life, arts and crafts, woodcraft, and forestry.

In setting up their two camps, San Diego City and County have blazed the trail for other American communities. The experience in group living is invaluable. Camping constitutes an important trend in the direction of making education truly an influence for democratic living.

## Parents and Pupils Like These Report Cards

EVERY six weeks pupils in the Thomas Jefferson High School, Council Bluffs, Iowa, bring home a group of personalis cards—one for each of their subjects from English to foreign languages, music, and math. Pupils are graded highly satisfactory, satisfactory, or unsatisfactory on several counts.

### SOCIAL STUDIES

Personalis Card

THOMAS JEFFERSON HIGH SCHOOL  
Council Bluffs, Iowa

Name \_\_\_\_\_ Homeroom \_\_\_\_\_  
Subject \_\_\_\_\_ Period \_\_\_\_\_

1-6 wks. 2-6 wks. 3-6 wks.

Days Absent \_\_\_\_\_

Times Tardy \_\_\_\_\_

Grade (A, B, C or E) \_\_\_\_\_

Ratings

HS S US

Achievements

Cooperation

Dependability

Courtesy

Conduct

Attention

Promptness

Neatness of Work

Daily Preparation

Participation

Tests

Make-up Work

Notebook

Current Events

Book Reviews

Projects—Summaries

HS—Highly Satisfactory

S—Satisfactory

US—Unsatisfactory

Teacher

Above is shown the rating system for the social studies. Other subjects are rated similarly. The other side of the card, with space for parent's signature every six weeks, carries the following message from Principal Ray F. Myers:

Training to be a citizen of character is as much a matter of developing the right attitudes as it is of teaching facts. If this is the case, it is, therefore, essential that the student report should list and check these personal traits and attitudes rather than place undue emphasis upon competition for mere letter grades. For this reason the grade system has been reduced to a satisfactory or unsatisfactory basis.

Please go over the card with your boy or girl. If satisfactory, commendation will be appreciated by your child as well as by the teacher. Parents can do much to encourage in the child a desire to improve.

We will always be happy to confer with you by person or by telephone.

## Ohio's New Approach To Aiding Farmers

THE VOCATIONAL agriculture staff of the state department of education and the College of Agriculture of Ohio State University recently cooperated in a joint project. Instructors were drilled on the subject of farm management during a two weeks' course, in order to better equip them to teach prospective farmers proper methods of farm management. To date 250 teachers have com-

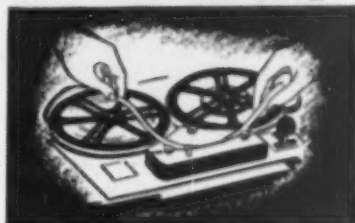
pleted, this two-week advanced training. Soil classification, use of maps provided by the soil conservation service, invoicing and appraising of the land, and water supply and soil were some of the subjects included in the course. Field trips provided the instructors with first-hand observation of farm sites.

The instructors were also taught about livestock, building facilities, available

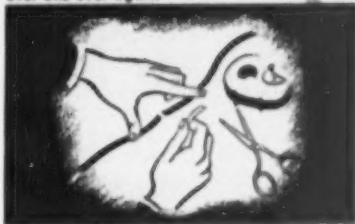
market outlets, and many other subjects. Methods of increasing the farm income were stressed in the advance training course. Adjusting to changes in economic conditions, land leases, contracts, and partnership agreements were included.

LYNN, Massachusetts, the Shoe City, conducts the only shoemaking school in the nation, if not the world. It is known as the Lynn Industrial Shoemaking School.

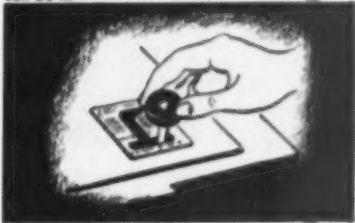
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OFFERS:



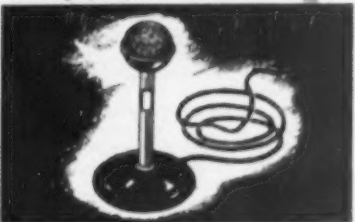
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## ONE SCHOOL DISTRICT FOR TWO COLORADO TOWNS



The school band was rated as superior the last three years in the state-wide fine arts contest. PTA plans to erect a roof over pool, considered one of the best outdoor pools in Colorado.



THE only school system in the state of Colorado covering two towns is the Cripple Creek-Victor District. One superintendent is administrator to both towns, and a school board, whose five members represent both communities, formulates the policies.

The Cripple Creek-Victor combination has overcome many problems which might baffle a much larger city. The question of liaison between school and family was solved by the formation of an organization known as the District Administrative Council. It consists of Superintendent of Schools Leslie Wilkinson, principals of the district, and officers of the two PTA's, who worked out a plan to meet alternately in the two towns for the purpose of discussing parent and school problems. During the school year these meetings are held once a month. Many of the problems presented by parents have been solved, and there is a stronger relationship between teachers and parents.

At the meetings, such matters as plans for building improvements are presented, state rules concerning the use of school buses are explained, and disciplinary problems are brought to light. Justifiable complaints of the parents are answered; the high cost of high-school graduation reduced; and such things as a first-grade

classroom's transfer from the second to the first floor effected.

Hot lunch problems were ironed out and a new metal fire escape was added to the building, as a result of these meetings. Other matters came up for general discussion such as federal aid for education, teachers' salaries, and the school budget. Last, but far from least, the behavior of the present younger generation is often examined.

Not only are many issues of vital importance discussed and authentic information to contradict false gossip and rumor supplied at the meetings, but an amicable relationship has been developed among the committee members, teachers, and parents.

Another important organization of the school district is the monthly meeting of the school principals. Realizing that the working day of a teacher is long and arduous, the school administrative details are discussed at the gathering of the principals. At this time the heads of the two school districts have an opportunity to get together on mutual problems and coordinate action of their schools.

At teachers' meetings subjects connected directly with classroom work and pupil problems are discussed.

Organized in 1930, the PTA of the

combined district schools plays an important part in the progress of the system. The association has been responsible for many improvements and innovations and has contributed consistently to many projects.

Criticism from the PTA has been constructive, and its ideas have been those of action rather than mere words. One year parents sponsored a free milk fund; another year they purchased a complete uniform for the band. This year the Cripple Creek Girl Scout Troop is being sponsored by the association.

A perennial PTA project is the student loan fund, with a committee of three to handle applications for loans. To date, all loans have been paid back. In addition the PTA makes an annual contribution to the city library, purchases tissues for the grade school, and supplies dishes for the high-school home economics room.

The Cripple Creek-Victor District has one of the few heated and chlorinated swimming pools in the state, and a pet PTA dream, postponed until material and labor costs come down, is the erection of a roof over the pool.

Sale of the first T.B. seals in Victor was in charge of the PTA. A nurse from Colorado Springs was sent up to weigh the children and when it was found that many were underweight, a pint of milk and some graham crackers were given to them each day. This program was carried on a number of years, under the auspices of the PTA and with the cooperation of the Red Cross.

### Hot Lunches

For the past three years the hot lunch program, considered the most urgent as well as successful PTA project, has been carried on under the direction of Mrs. O. E. Wing.

In 1940 a Teachers' Association was born. Every other meeting is a social gathering, attended by members of the board of education, faculty members, and their wives and husbands.

One of the first projects completed by this association was a comprehensive and complete study and formulation of the philosophy of education in the district. Studies have been made on methods of selecting faculty personnel, salary schedules, curricula, professional ethics, and student guidance. Both schools now employ two types of curriculum—general college preparatory and vocational training courses. Good student government has developed in both schools as a direct result of the student guidance study, and there is a fair beginning in personal counseling.

One of the outstanding events of the school year is the May Day exhibit. This is open house for the whole district. Teachers and students work hard all year in order to have as good a display as possible. Special effort is made to write more legibly. "A" papers are kept during the year for display in the spring; art work is done with an eye on the May Day exhibit; and the students endeavor to keep their notebooks as neat as possible so they may be viewed by the parents.

May Day proved to be so successful the first year that the following year two days were set aside for the event. Now the teachers visit other schools and see what is being done there.

The people of Cripple Creek and Victor feel that the success of their unique system is due, in large measure, to a well-planned program and the cooperation of all groups, which make for better understanding of mutual problems. The system has no debts, no bonds, and no registered warrants, but does have modern equipment and beautiful supplies. A very small faculty turnover speaks much for the system's success.

## Rigid Brick and Mortar Prevent School Flexibility

By JOHN MILNE  
Superintendent of Schools  
Albuquerque, New Mexico

SCHOOL buildings should be built to accommodate the classes and programs held in them. This is just common sense, and generally speaking, school buildings are planned to do just that.

But as long as brick and mortar are as rigid as they are today, all talk about easy adjustments to take care of changing needs seems in a large measure to be wishful thinking. Yes, it is much easier to talk about easy adjustments that can be made after the schoolhouse is built than to actually bring them about.

How often the school building finds itself housing a certain kind and number of classes one year and a wholly different school program the next! The building can't change much, but the curriculum is constantly changing.

Early school shops were equipped with small benches and small machines. They became obsolete when the standard equipment of today had to be housed with space between for long material now used in some of the shopwork, and when power lines rather than light lines became necessary.

It is next to impossible to carry on effective work in radar and allied work in any laboratory built 10 or 15 years ago.

The gymnasiums of yesterday are health laboratories today. Those structures that had only floor space and seating arrangement are out of date unless it is possible to cut through the walls and build adjoining rooms suited to the health program so closely associated with the athletic and play activities that go on in the gymnasium today.

The moving-picture arrangement in the older buildings clearly demonstrates that the curriculum changes faster than you can adapt the buildings to it. When the room is darkened, the air shut out, and 80 children are housed in space intended for 40, one is thankful that fuel air doesn't ignite like gas, otherwise there would be some terrible explosions.

Sub-basement rooms have been abandoned many times, but when populations increase faster than new buildings can be built, they have been occupied again and again by classrooms simply because there was no other place to hold classes.

Yes, it is much easier to talk about easy adjustments that can be made after the school house is built than to actually bring about that easy adjustment.

## Chicago Finds Way to Decrease Glass Breakage

WHEN REPLACEMENT of the broken glass in the Chicago schools became a major problem representing some \$300,000 annually for repairs, Board Member William Bachrach decided that something should be done about it, according to *Educational Screen*.

A campaign was started, with the promise that equipment which would not otherwise be supplied would be bought with money formerly spent on glass replacement. A city-wide committee composed of civic and service groups, representatives from all administrative levels of the school system, the juvenile court, and many others was appointed. Radio stations, newspapers, and various other means were used to inform the public of the campaign.

Results were astounding. Glass breakage was reduced almost 50 percent. A subcommittee was formed to consider awards, and it was decided that radios, tape recorders, motion picture projectors,

playbacks, and books would be presented.

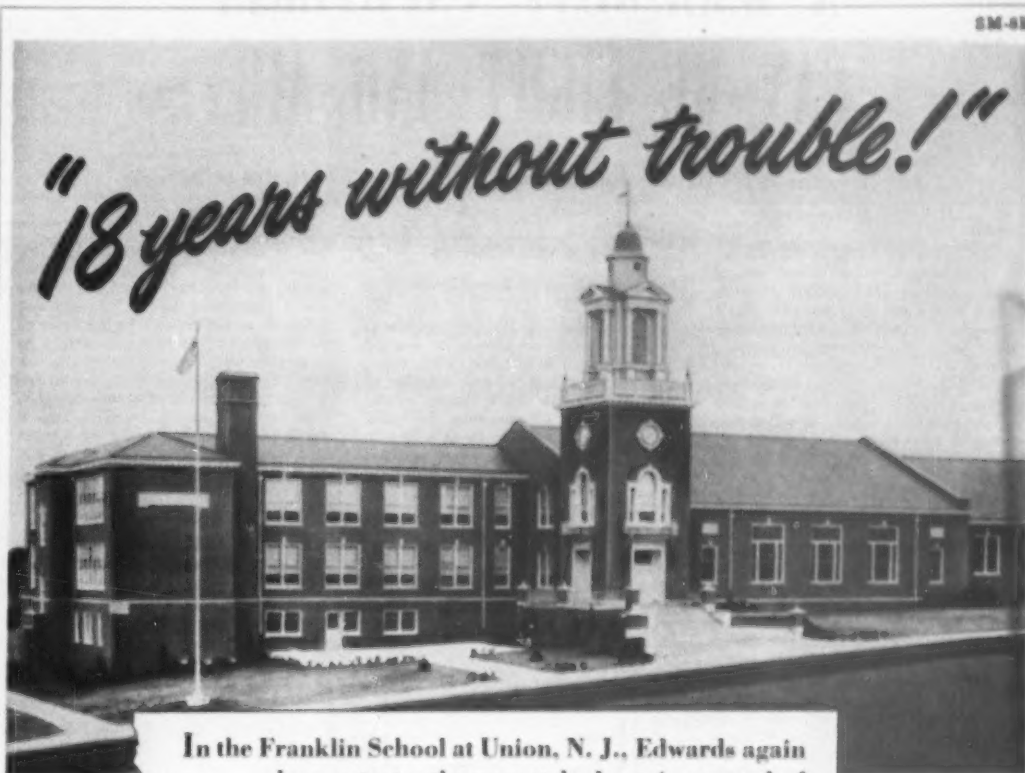
A group from each winning school was selected to make its own choice of books. The divisions of radio and visual education selected the equipment.

Presentation of the awards will be made at school assemblies throughout the semester, in order to maintain the interest in the campaign. Radios and newspapers will also continue to publicize the campaign, in order to further reduce the wasteful expenditure for glass.

## On the Calendar

Association of School Business Officials, Statler Hotel, Boston. October 3-6.  
County and Rural Area Superintendents Conference, Memphis, Tenn. October 10-12.  
National Council on Schoolhouse Construction, Indianapolis, Indiana. October 13-17.  
National Institute of Governmental

Purchasing Conference, Hotel Cleveland, Cleveland. October 23-26.  
American Education Week, November 6-12.  
National Safety Congress and Exposition, Morrison Hotel, Chicago. October 24-28.  
School Food Service Association, Hotel Statler, Washington, D. C. November 16-18.  
American Vocational Association, Atlantic City, December 6-10.



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# SCHOOL LUNCHROOM DEPARTMENT



## A BASEMENT CAFETERIA CAN BE LIGHT AND AIRY

But it takes a lot of careful planning. This is what we did at Belvoir

UNIVERSITY HEIGHTS is a fast growing Cleveland suburb located southeast of Cleveland Heights, entirely within that school district. It is a residential district of beautiful, charming homes and a few concentrated shopping centers.

University Heights opened its first elementary school last year, and its second, Belvoir, opens this month. It will accommodate a kindergarten and grades one through six. Previously all the children attended schools already built and in use in Cleveland Heights. Within the last 10 years this city has so increased in population that it is no longer practical nor possible to accommodate all the children in the present schools. The largest increase in school population has been, and is now, at the elementary school level. A recent school survey shows that there will be a large number of children attending elementary schools in this city within the next five years.

Belvoir Elementary School was planned and the bond issue passed almost six years ago. The twelve-and-a-half-acre tract of heavily wooded land has been owned and held in readiness by the Cleveland Heights Board of Education for many years. During the years of waiting, plans have been made to utilize these woods and land for recreational and na-

By MARY FARNAM

School Management's School Lunch Editor

ture study not only for this one school, but for the whole school system. Soaring prices, shrinkage of the dollar value, scarcity of materials, and scarcity of workmen in the skilled trades caused many delays. Of necessity the plans were reorganized many times to try to make the cost match the money available and yet build a two-story school that would meet the needs.

I had been envisioning a cafeteria on the ground floor with an outside terrace where luncheon trays could be taken on balmy days. When the plans were first being worked out, I was unhappy to learn that the space allotted to the cafeteria would be in the basement. That bogey

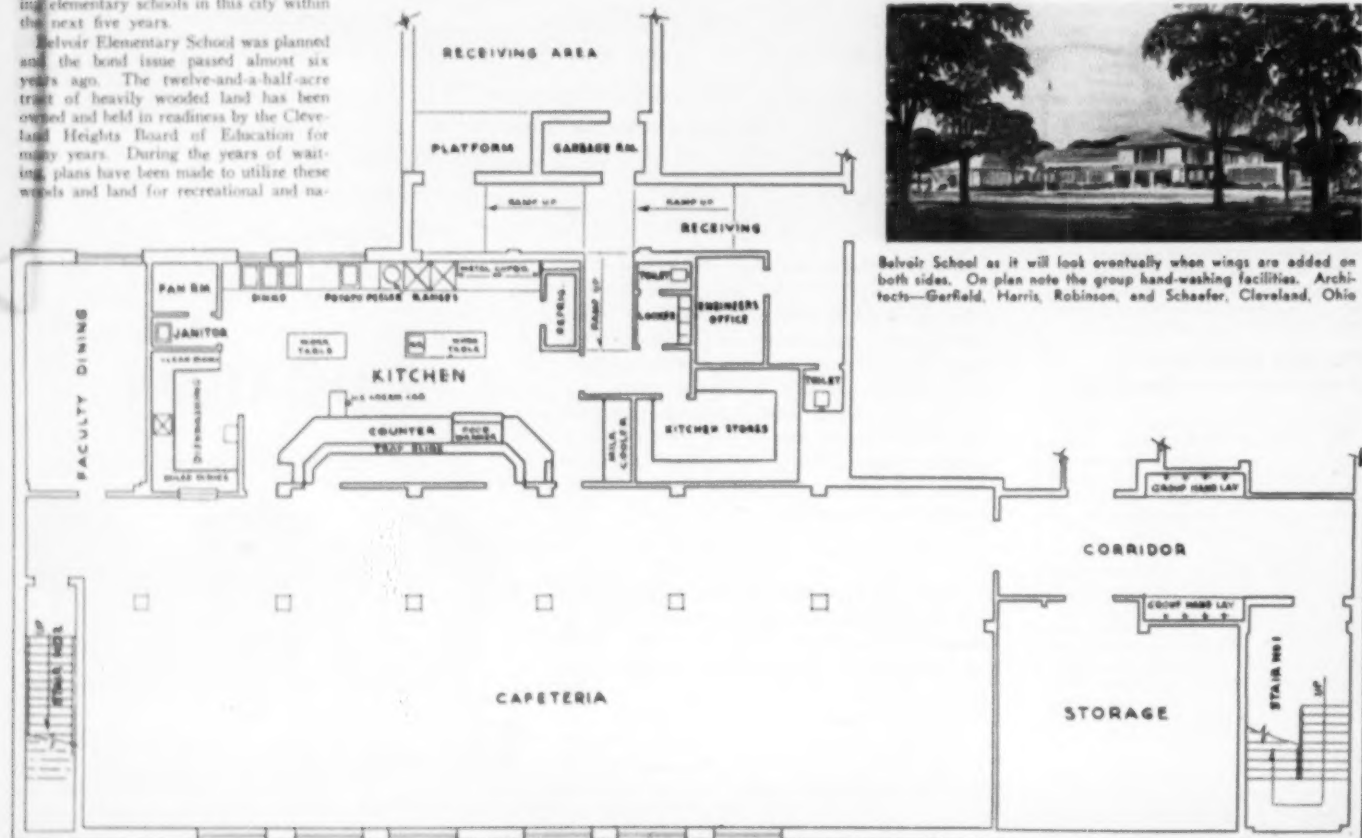
man of all building plans these last few years, "economy," won out. However, careful planning has made the cafeteria dining rooms and kitchen as light and attractive as the rooms on other floors of the building. This was accomplished by placing the cafeteria dining room on the east side of the space. Outside, the ground is graded off in a gentle slope so that one side of the cafeteria area is really at ground level. On the kitchen side, excavations were also made so that the delivery entrance is at floor level. There are adequate windows along the west kitchen wall and in the teachers' dining room.

On this page is the floor plan of the kitchen and dining room. Perhaps you will find an idea in this plan that you can adapt to your use, and maybe more. On each side of the spacious corridor are

group hand-washing facilities. These oblong, stainless-steel wash basins are recessed into the wall and are built at a level low enough for elementary school children to use with comfort. At least five youngsters on each side can use these basins at one time, since there are five faucets which supply mixed hot and cold water in each basin. There are also five soap-dispensing machines, and five paper-handtowel holders on each side. Recessed into the wall just beyond these basins are two openings cut into the wall and covered with a swinging, stainless-steel door for disposal of the soiled towels. No child should go to lunch in this cafeteria with dirty hands!

Let's take an imaginary trip from the "customer" side of the counter. In order that the cafeteria dining room can be put to multiple use, the food counter is located inside the kitchen. The top of the counter is 14-gauge stainless-steel and the front is 20-gauge. It was originally planned to have stainless-steel shelves under the counter on the kitchen side, but again "economy" said no. The most interesting feature of this counter is the height — only 28 inches. The stainless-steel, tubular tray slide is another inch and one-half lower.

For years it has bothered me to watch grade-school youngsters going along a high cafeteria counter with a high tray rail, holding their trays at chest level with their chin or eyes at only about the height of the counter.



Belvoir School as it will look eventually when wings are added on both sides. On plan note the group hand-washing facilities. Architects—Gerfield, Harris, Robinson, and Schaefer, Cleveland, Ohio

So here we have a low counter for the convenience and comfort of the children. It may seem a little low and awkward for the adult counter server, but she can adapt herself to that as part of the job of working with children.

Trays are placed on low tables against the dining-room wall just before the children enter the counter space. First on the counter will be the milk. (More about the milk cooler later). Next the hot food. There is a gas-fired, dry food table. This eliminates plumbing, the need for hot water and steam, expensive maintenance, and contributes to the ease of use, care, and cleaning. The ice-cream cabinet, while movable, is placed at right angles to the counter, since we have found this the most efficient placement. No counter space is sacrificed, since the cabinet is not inserted in the counter. At the end of the counter is a cutout section for the cashier.

#### Drinking Fountains

The cafeteria tables are light blood wood with hard-finish tops. There are three sizes seating four, six, or eight children. The chairs are combination wood and tubular steel. Two heights of tables and chairs are used to accommodate the smallest children and the older children. Refrigerated drinking fountains (not shown on the drawing) are placed at convenient locations in the dining room. These fountains also can be used to fill water glasses, though in recent years we have not encouraged the use of water glasses in the grade-school cafeteria. They are difficult for the children to balance, and the cost of washing them each day and the replacement cost are factors to reckon with.

After lunch is finished, the children take their trays to the south end of the dining room and pass them through the disposal window into the dishroom. Stairway number two will be used for leaving the cafeteria. It leads directly onto the playground. Stairway number one, at right, will be used only for traffic coming downstairs.

The walls of the dining room are cream tile halfway up. The ceilings in both the kitchen and dining rooms are soundproof material. The floor of the dining room is two-tone asphalt tile, cream and rose, laid in an attractive block pattern. This rose color is also used to paint the outside of the wooden doors and framework along the walls.

#### "Dream" Milk Cooler

Now let's take a trip through the kitchen. Starting at the entrance, the milk cooler is in the corner against the wall. This is my pet piece of equipment, a dream on a blueprint that finally became an actuality. There are three sections, each with capacity for storing eight crates of milk on a dolly. The cooler is topped with stainless steel. Since it is only 43 inches high, it provides extra shelf space. The floor of the cooler is level with the floor of the cafeteria. Therefore, the dollies can be rolled into the milk cooler by the delivery man and rolled out to the cafeteria counter as needed at noon. After lunch period, the empty bottles received

in the soiled-dish section can be rolled out to the back door and receiving room for pickup by the milk company.

Because of the grading and location of the storm sewers and other factors, it was necessary to build the ramps at a slight incline. However, anything that is delivered, milk included, can be unloaded onto a dolly and wheeled to its location. In all the other schools in our system

there are steps, maybe only one or two, but steps, at the delivery entrance which means lifting and reshandling everything that is brought into and taken out of the cafeteria. Since this is a daily process, it seems important to save as much time, motion, and energy as possible.

Garbage cans can also be wheeled to the garbage room off the back corridor and back entrance. This room has an

outside door of its own. The floor is cement with a center floor drain so it can be washed and flushed out easily. Although I had to give in to economy and other factors several places along the line, I held-out-for an all-on-one-level layout for delivery and disposal. Every day such a layout will pay dividends in time, motion, and energy which in the end spell money saved. (Turn page)

SM-9B



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## A Basement Cafeteria

(Continued from page 15)

In the southwest corner is the walk-in refrigerator. Inside is a frozen food locker. Continuing along the south wall are metal cabinets above and below the stainless-steel top work counter. Next is a range with half-solid, half-open burner top and two ovens underneath. The hood over the range is stainless steel and has removable grease filters.

Next comes the vegetable peeler which empties into the vegetable sink. Then comes the three-compartment hot and pan sink furnished with swing-spout mixing faucet and level drains below. These sinks and drainboards are 14-gauge stainless steel, as are the shelves under the drainboards.

In the southeast corner is the fanroom

for the ventilating and air-conditioning fans and machinery. Next is the closet for cleaning supplies, and its sink. Next along the south wall is the dishwashing unit. Facing the soiled-dish window, at the left, not shown on the drawing, is a sink. Also not shown on the drawing is a perforated pre-rinse or flush unit immediately preceding the dishwashing machine. All these sinks, shelves, and the dishwashing machine are stainless-steel. Opposite the dishwashing machine

is a hand-washing lavatory. The water is operated by foot pedals, and the hot and cold water can be mixed as desired.

The two worktables are topped with sectional maple and equipped with drawers and shelves underneath. One is low in height for use when doing work which can be done sitting down. The other is at counter height. One is on wheels so it can be moved about as desired. The mixer is placed on end of one.

The windows over the sinks and drainboards extend to the ceiling, supplying adequate light. The kitchen walls are tiled like the dining room. Wooden frames and doors are a soft green to match the color of the metal cabinets.

The storeroom is located as near to the kitchen as possible since there was not room to have it opening off the kitchen. It has easy access to the delivery ramp and corridor. It is equipped with shelves placed at various heights. There is space below the bottom shelf for large containers on wheels.

### Plan for the future

This layout is not perfect. Many compromises had to be met and made. However, we do feel this cafeteria setup has many more advantages than disadvantages. The plan and layout are very flexible. The use of the equipment can be adjusted to meet the volume of business. Blueprints and specifications are made and waiting for the future time when the building can be completed as planned originally. (There are 11 classrooms for the 330 children expected in September.)

Future plans, for example, call for a "community room" for the use of the many groups in the growing community who need a place to meet and enjoy themselves, as well as to plan for future growth of the town. Part of this room will be a small kitchen with enough equipment to prepare refreshments and clean up after the many meetings that will be held there. The serving of food adds a certain something to any group meeting which cannot be accomplished in any other way. Entrance to this room will be directly off the parking lot so that the rest of the school can be shut off, if only the meeting room is to be used.

Six more classrooms are also on the blueprint. All this provision for future expansion is practical preparation for a need which already exists. The school census shows that the children are already here and fast approaching the age for entrance to school. How much better it will be to have the school ready to meet the needs of these children than to have overcrowded schools, half-day sessions, and other makeshift arrangements.

We think Belvoir is a beautiful, practical modern school, of which the community can be justly proud. It will offer for many years to come the best in educational facilities to the children of University Heights.

Three other schools are being planned for completion in 1953. It is fun to work in a growing community and a privilege to have a part in building for the future.

NEW YORK high-school pupils eat millions of dollars worth of food in the school cafeterias, according to a recent financial report issued by William Jansen, superintendent of schools. During the fiscal year that ended August 31, 1948, they consumed \$5,282,860 worth of food. Milk sales increased while candy and pastry sales slumped.

Most popular item on the menu was the hot lunch served in cooperation with the School Lunch Program, a total of 5,830,000 being served. For the complete lunch students paid 19¢ a meal, and the government contributed 9¢. Actual cost of each was 35.7¢. Loss on these meals was made up by profits on other items.

## ...ONE OF THE BEST WAYS TO LOWER OPERATION COSTS—

is to eliminate unnecessary food waste by serving meals that are consistently flavorful. Today hundreds of institutions are depending upon economical Maggi's Granulated Bouillon Cubes to bring new appetizing goodness to their soups, stews, gravies and the many other dishes that call for meat stock. Try adding several tablespoons of this flavor-rich Maggi's Granulated Bouillon to all your everyday recipes—also remember, it makes a delicious instant-quick "broth".

### 2 OTHER MAGGI FLAVOR FAVORITES

★ Maggi's Seasoning

★ Maggi's Gravy Powder, Chef Style

## BRINGS FLAVOR TO BUDGET MENUS!



## MAGGI'S Granulated BOUILLON CUBES



The Nestlé Company, Inc., 135 East 44th St., New York 17, N. Y.

**A Mop Wringer makes news when**

Institutions re-order more wringers the minute they see first sample

LANYONS OFFER TO PAY FOR WRINGERS IF BUILDING MANAGEMENT WON'T

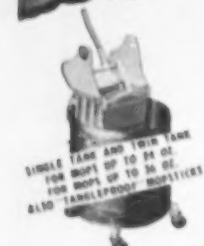
CITY OF OVER 500,000 WILL BUY NOTHING BUT GEERPRES WRINGERS

Building Superintendents Want Geerpres Wringers for their houses

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To get the reasons back of this story—why GEERPRES makes floor cleaning so much easier, more effective and lower in cost—write for a catalog and price list, pick the size you want and order one. One look at a GEERPRES and you'll see the difference, too.



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## MORE WORK-SPACE!

Less waste space with "Airplane Tables!"



Flexible Functionall Book shelves separate 2 students working at same desk, replace idle aisle space. Use 4, 6 or 8 units to make 1 large work area for group work. "Airplane Tables!" eliminate extra tables and chairs, equalize per-unit seating cost. Ideal for primary grades through senior high. Approved as standard equipment by educators everywhere.

Top sizes: 21" x 42" & 31" x 48". Table heights: 21", 23", 25" & 27". Top is built up 1-1/16" stock with Birch face ply & matching Birch or Maple banded edge. Metals: Baked on enamel, taupe or beige. Wood finishes: Natural or School Brown.

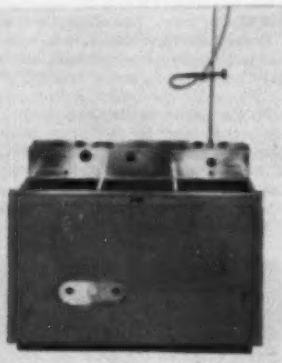
Write for full details!

**AMERICAN DESK MFG. CO.**  
Tempe, Texas



## NEW CAFETERIA EQUIPMENT

Use the SCHOOL MANAGEMENT Readers' Service Listing on page 29 and the postcard. Indicate the key number of products about which you wish to receive further information.



### SM-414B New Dishwasher

Cafeteria managers will like the convenient accessibility to all controls and compartments in the new, 3-compartment L-O dishwasher with prewash made by Lansing Manufacturing Company. Rounded corners, straight, clean lines, and a complete absence of projecting parts, ridges, or openings are other good features. Manifolder water, drain, gas, and electrical connections simplify installations.

Spray-flushing tank, with ample garbage-collecting basket, saves time and economizes on washing compound. Wash tank is equipped with grease skimmer. Rinse tank has overflow passage to adjacent wash tank. Two dish and 2 silver baskets come with unit. Motor is vertical, ball-bearing, 1/3 hp capacity.



### SM-415B New Line of Stoves

Modern in appearance and performance is the new line of Detroit-Michigan Stove Company Jewel and Garland gas ranges. The new Flo-line design has rounded corners, even inside the oven. Front lines curve outward. Cooking top curves downward two inches over front and sides.

The porcelain top is stainless, acid-resisting. Automatic top lighting, top grates built to support the smallest utensil, automatic oven heat control, and an extra large oven are other features of the line. Home economics departments particularly will welcome the model pictured above.

**SM-416B Aluminum Foil**  
New for institutional food service use is the aluminum foil produced by the Reynolds Metal Company. It makes

a pliable, airtight covering which holds in moisture and flavor and retains crispness when used to cover or wrap food to be stored in the refrigerator—such as cooked meats, salad vegetables prepared for use, cooked vegetables, cut butter, or leftovers. It seals in the flavor and prevents darkening and drying of meats, cheese, cold cuts, and the like. When food is to be reheated, pans may be placed in steamer or oven with the foil intact.

**SM-417B Washing Solution Control**  
Maintenance of any desired concentration of Calgonite, the mechanical washing compound, is possible with a new control available from Calgon, Inc. It automatically and continuously measures the strength of the washing solution. As dilution occurs, the proper amount of solution from a mixing tank is automatically fed to maintain the concentration desired. The control unit consists of four basic parts which

may be supplied separately for a tailor-made installation. The control operates on 110 volt, 50-60 cycle AC.

**SM-418B Air Freshener**  
An air freshener and deodorant safe to use near foods since it does not affect their flavor is Good-Air, a product of the Bridgeport Brass Company. It cancels strong cooking odors—including those from onions, cabbage, and seafood—  
(Turn page)

SM-13B



# WATCH OUT—

## he's tossing your dollars away!

It costs you good, hard cash every time tableware winds up in the trash pile. Replacement expense on some china items is staggering—runs as high as 100 percent annually.

What can be done about it? Keyes offers an answer in KYS-ITE. This durable plastic tableware...practically unbreakable in ordinary service...pays for itself by reducing your operating costs...yet in looks and feel KYS-ITE is acceptable as the china or earthenware you must continually replace.

Read the advantages below—see why KYS-ITE is unique among plastics—then get further facts from your wholesaler. If you have no regular source of supply write for the name of the wholesaler nearest you.

## Why the smart buy is KYS-ITE plastic tableware

Reg. U. S. Pat. Off.

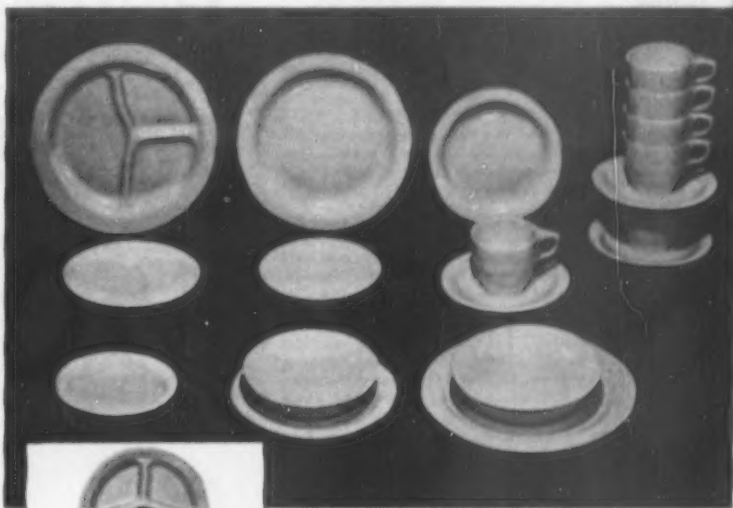
**1. STRONG YET LIGHT**—In regular usage, KYS-ITE is practically unbreakable...resists chipping and cracking...yet light...easy to handle.

**2. CAN BE STERILIZED IN BOILING WATER.**

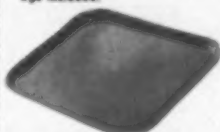
**3. EASY TO KEEP CLEAN**—KYS-ITE's smooth hard surface speeds dishwashing.

**4. STAYS BEAUTIFUL**—Maple color goes through the material. KYS-ITE does not sacrifice lasting qualities for temporary color appeal.

**5. QUIET**—KYS-ITE is non-resonant...ends "china-ware clatter."



KYS-ITE's maple color partition plates hold a full meal—beverage included.



KYS-ITE Trays, Red, Blue, Brown—round or rectangular. Ask your jobber about sizes and prices.

**COMPLETE SERVICE**—All KYS-ITE. Dinner plate; salad or bread and butter plate; bowl in 2 sizes for soup, salad, cereal, etc.; a smaller fruit dish; cup and saucer.

# KEYES

MOLDED PRODUCTS

KEYES FIBRE COMPANY, 420 LEXINGTON AVE., NEW YORK 17, N.Y.

Plant at Waterville, Maine

## Lunchrooms Now Supplant School Lunch Boxes

**T**HE MODERN school lunchroom has almost eliminated the old-fashioned lunch box in Ohio. Some 1,275 schools participate in the important business of providing warm, wholesome meals at a minimum cost. An average of 214,232 children in this state are daily served lunches in the schools.

Federal funds apportioned to Ohio for 1948-49 amount to \$2,137,926. The state

legislature has provided an annual appropriation each year for state administration only. About one-fourth of the other states supplement federal funds with state funds for reimbursement purposes.

Wade D. Bash, public school lunch program supervisor in Ohio, holds lunchroom conferences in many sections of the state. School superintendents, principals, lunchroom managers, cooks, PTA

representatives, and so on, attend the meetings. Such topics as menu planning, nutrition, school lunchroom sanitation, and related subjects are discussed.

**S**HAD, salmon, carp, croakers, perch, and tuna—those are the kinds of fish children should learn to eat as part of the national school lunch program, says the Fish and Wildlife Service. It will help the nation's fishery industries find new markets for their products.

SM-14B



**START  
WITH  
STOX\***  
GRANULATED  
BOUILLON

—for better tasting  
school lunches!

**SOUPS AND SOUP BASES**—Use STOX for your base to make a variety of wholesome soups, any quantity . . . any time! A delicious Friday favorite, STOX gives soups a hearty meat-like flavor yet contains no meat. Also supplies niacin, riboflavin and B-1 that growing children need.

**GRAVIES AND SAUCES**—STOX makes wonderful gravies and sauces with its rich aroma and dark brown color. Easy to make in large quantities . . . Economical, too.

**MEATS**—STOX enhances the flavor of both better grades and less expensive cuts of meats. Packaged in convenient 1-lb. jars, STOX helps you serve delicious budget lunches that mean more student customers.

**BAKED DISHES**—Cheese dishes, macaroni, spaghetti, baked lima beans—vegetables of all kinds—are richer when STOX is used. It's a wonderful flavor improver.

4oz. STOX sample free!

HOTEL & RESTAURANT DEPT. SM-9-49  
Attention: Miss Margaret Cameron  
STANDARD BRANDS INCORPORATED  
193 Madison Avenue, New York 22, N. Y.

Send me today a free trial-size jar of STOX  
plus 7 time-saving recipes.

Name \_\_\_\_\_

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Address \_\_\_\_\_

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**FLEISCHMANN'S STOX**  
GRANULATED BOUILLON

**Solve Your  
locker problem  
this way...**

If your school locks aren't uniform, forgotten keys and combinations are wasting hours of staff and student time.

You save that time when you standardize on Dudley Locks, Master-Charted to give you quick access to any locker. Use the Dudley Self-Financing Plan to get schoolwide protection without budget expense. Write for details.

**DUDLEY LOCK  
CORPORATION**

370 W. Monroe St.  
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**LOOK...Here it is!**



The  
perfect dishwasher  
for the school lunch!

**KEWANEE PRE-WASH**

... pre-washes, washes and rinse-sanitizes in ONE low-cost space-saving unit. Goes a step beyond ordinary three-tub units in providing sanitized dishes. Meets all health department requirements.

Easy to operate . . . easy to maintain. Washes up to 3000 dishes per hour. REALLY CLEAN . . . also handles glasses, silver, pots and pans. LOW PRICE . . . FULLY GUARANTEED.

WRITE FOR FULL INFORMATION. Ask also about Kewanee's new standard unit.

**KEWANEE INDUSTRIAL WASHER CORP.** KEWANEE, ILLINOIS

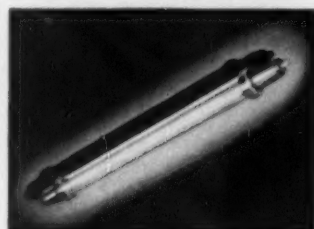
## NEW CAFETERIA EQUIPMENT

(Continued from page 17)

and will not stain or spot walls. Good-aire comes in 3½ and 12-ounce metal containers which dispense solution by means of liquefied gas and a noncorrosive, Bakelite nozzle.

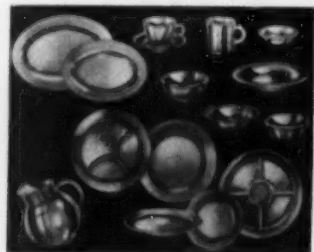
**SM-419B Synthetic Tableware**

Durable Boonton tableware is made of Melmac, a synthetic which looks and feels like china but is lighter in weight. Parker D. Perry Incorporated distributes these attractive dishes, available in blue, buff, and yellow. They are unaffected by detergents, soaps, and food acids, and wear well under standard dishwashing methods. Grease washes off easily. Rounded edges give extra protection against chipping and cracking.



**SM-420B Germicidal Lamp**

Developed for use in meat and vegetable coolers, and in all areas where low temperatures are a necessity, are the new Zeroline germicidal lamps made by Hanovia Chemical and Manufacturing Company. Their special construction size and jacketing assures effectiveness and long life even at near zero temperatures. Zerolines are life-rated at 8,000 hours. Sizes are 16 and 30 inches.



**SM-421B New Restaurant Ware**

Serviceability is an outstanding feature of the new Jade-ite Fire-King restaurant ware made by Anchor Hocking Glass Corporation. It is heatproof, and will not craze or warp when prewarmed for serving hot food. It cannot absorb liquids, food particles, or odors. The smooth, hard surface is easy to clean. These dishes are available in 16 essential items in desirable, mass-feeding sizes. Color is a delicate, appetizing green.

**I**N White Plains, New York, the adult education council, aided by 25 women volunteers, decided to give its night school of 179 classes a "Hooper Rating," under the supervision of Ernest H. White, director of adult education.

Each of the 25 women made 25 telephone calls one week to persons representing a random sampling of residence telephone subscribers. Their purpose, according to the *White Plains Reporter-Dispatch*, was to learn about how many people knew of the program, how they found out about it, and how many participated in it. They were also interested in criticisms and suggestions.

## ASBO Boston Meeting Promises Much Good Discussion, and Help

**DO YOU** prefer general discussion from the floor rather than long papers on problems of school business administration? If so, be sure to attend the 35th annual convention of the Association of School Business Officials at the Hotel Statler in Boston, October 2-6. Business managers and other administrators will air their problems, get help, and give answers to help others.

Short statements of many complex and perplexing administrative problems by outstanding officials will precede the more extended discussions in which men and women of ability, training, and experience will take part.

On each of the following questions a 10-minute paper will be presented, followed by 20 minutes of discussion:

How far should federal support, state support, and local support contribute to noncapital and to capital expenditures? Where should control be exercised? What should be the means of raising the money at each of these levels? What new local sources are available to relieve the present heavy property taxes?

### After-School Problems

What of the expanding uses of school premises for nonschool purposes? What of religious uses? Should private enterprise be permitted to use school property, and what should it pay? Who should bear the expense of civic center uses? How do you publicize and enforce rules and regulations and still retain the good will of the public?

What retirement plans are now in effect, and how far do they operate to facilitate recruitment of top-flight personnel?

What are the implications of square vs. traditional classrooms in various climes and for various education programs? What size should classrooms be? What is the latest in size and design of auditoriums for elementary, junior high, senior high, and the junior college? Where is single-story preferable to multistory construction, and where is wood frame indicated instead of concrete housing?

When will specification by trade-name suffice, and when should open specifications giving description of performance and qualities be used? When would you employ practical tests, and when laboratory tests? How effective are guarantees and certification by suppliers? How can legal restrictions on purchasing be relaxed and still preserve protection of public funds?

How should caretaker and gardener work be allotted? Should head caretakers be classified by educational level of the schools in which they serve, or by size of their staff? Should split shifts be used, and how closely should the work be scheduled minute by minute? How can operational employees be kept informed of policies and procedures?

### Accounting Practices

How extensively are student body accounts supervised, and in what manner? What are the benefits of segregating strictly educational costs from such noneducational charges as civic center and lunchroom costs? How frequently and in what detail should financial reports be given to boards of education to best serve them? What progress is being made toward uniform school accounts by the cooperation of

the local, state, and federal agencies?

What of the new contract method of maintenance of plant? How do its costs compare with the employer method? Should maintenance be controlled by specified budget items, by assignment of lump sums to schools, or by assignment to maintenance department? What is a justifiable budget for maintenance of school plant?

Which affords the best personnel and the best esprit de corps, the merit

plan, straight seniority, or free choice of employees? Should rating of employees influence salary adjustments, and how? What is a good salary schedule?

How effective can instructional supply service be? When should deliveries be made direct and when from central stores? When from central stores, how frequent? Should back orders be entered on stock items? Is ordering by telephone, as done by chain stores,

practicable and desirable? Should the central office break down instructional supply appropriations, or should the principal at the individual school have this privilege and responsibility?

What of the expanding lunchroom program? Should federal and state subsidies be increased? How much more of the costs should be assumed by the local districts? Is central operation of cafeterias preferred to individual school operations? What should

SM-17B

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DIRECT (LIQUID) SCHOOL DUPLICATOR WITH  
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OR DRAWN. PRINTS IN ONE TO FOUR COLORS  
AT ONCE... ON ANY WEIGHT OF PAPER

*New-Day Price*  
**\$149<sup>50</sup>**



You owe it to yourself and to your work to know this great new tool-for-teaching. Mail the coupon now for D-10 data; if you like we'll arrange an inspiring demonstration showing how capably this machine organizes minds, stimulates learning, helps make you a better, happier teacher!

**"MAGIC" COPY CONTROL**  
All-over clarity from first to last copy... at a finger-touch!

**FOR NEW COPY BRIGHTNESS AND NEW LOW COPY COST**

**MAIL!**

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2220 W. Harrison St., Chicago 12, Ill.

Give them  
☐ At no cost or obligation please send me data on the new Ditto D-10 School Duplicator.  
☐ Also—please arrange a D-10 demonstration for me.

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 City \_\_\_\_\_



## ASBO Boston Plans

(Continued from page 19)

be the training of the lunchroom administrative staff?

In addition, round table discussions of some two-hours' duration each will be held on the following general fields:

1. Planning and construction of school buildings.
2. Problems of administration in larger cities.

3. Problems of administration in smaller cities.

4. Personnel administration.
5. Operation of plant.
6. Accounting practices.
7. Maintenance of plant.
8. Seeing in instructional rooms.
9. Control of construction after award of contracts.

At these round tables the subtopics of discussion will be left entirely to the discretion of the audience.

The meeting will not be lacking in the thrill of a few good orators, as four top-flight speakers will be heard, says President Arthur A. Knoff.

**I**N CEDARHURST, New York, eighth graders learn percentages by figuring state and federal income tax forms about the same time their parents are worrying over this matter, reports the Metropolitan School Study Council Exchange.

SM-18B



## Win Praise for GRAVY that's EXTRA RICH BROWN DELICIOUS

—here's the simple secret

Just add Kitchen Bouquet. It gives extra rich brown color, brings out the full deliciousness of the meat flavor. Contains no vinegar, no artificial flavorings to "smother" the true taste of the meat. And here's another tip. When roasting meat at low temperature, always brush lightly with Kitchen Bouquet, before cooking. Meat will brown beautifully on the outside.



**KITCHEN BOUQUET**

Used by Good Cooks and Chefs for Over 70 Years

At your grocer's in 3-oz. and 6-oz. sizes. For Pts., Qts., and Gals., call your institutional supplier.

**Free!**

quantity recipe cards and 4-oz. bottle Kitchen Bouquet. Just drop penny post card to Kitchen Bouquet, Grocery, Store Products Co. (Incorporated), Dept. SM-9, 480 Lexington Ave., New York 17, N. Y.

**JEFF SAYS**



Maybe I don't know too much about public relations, but I do know I'm proud of our school and the kids who come here to learn.

They know I like them, and we help one another. It's no trick at all to get them to help keep their building clean once they feel proud of their building, too. Come to think of it, it's really our building, isn't it? ... *Julius Barbone, Michigan State College, East Lansing, Mich.*

## Is the Superintendency Really a Profession? If Not, Why Not?

By OTTO HAISLEY  
Superintendent of Schools  
Ann Arbor, Michigan

Condensed from  
Michigan Education Journal

**I**S there a profession of school superintendency? Or—

Is the school superintendent a highly specialized teacher?

Is he a specialized administrator with a school teaching background?

Is he a specialist in property management and finance as far as these fields overlap the field of public education, its physical plant, and its financial support?

Is he one of that group which must know a little about many things, but not necessarily too much about any one thing, a kind of jack-of-all-trades and a master of none?

Will the school superintendency ever advance to the point where I may walk up to a doctor or lawyer or engineer or university professor and say that my work calls for qualifications just as specialized and just as specific as those his calls for?

It depends on whether the superintendent's leadership is regarded as of a generalized or specialized character. Is his leadership due to the possession of a rather nimble wit, an ability to take in a new situation and quickly weigh all its factors, an ability to shift gears in a split second if need be, the possession of powers that permit some good open-field running, a change of pace, reversing the field, the use of a straight arm, and such tactics?

Or are the professional leadership, understanding, and skills which the superintendent possesses, and which manifest themselves in a school situation, just as specialized as the skills and understanding of the surgeon during the progress of a major operation?

### Professional Examples

It seems that the professions of medicine and law have something to offer the school superintendency if it is to measure up to the traditions established by most competent leaders in the school administration field. The medical profession assumed leadership in isolating the learnings and skills essential for the doctor and seeing that these were made a part of his experience. And that profession made sure that proper legal safeguards were set up to prevent practice by anyone deemed deficient in essential areas. The lawyers, in developing their profession, have taken some chapters from

SM-19B

## Parents and Educators Approve AN-DU-SEPTIC Dustless Crayon

✓ EASILY SEEN AT A DISTANCE

✓ WILL NOT INJURE BOARDS

✓ SAFEGUARDS HEALTH

AN-DU-SEPTIC White is made in round, square or hexagonal shapes. In boxes of one gross, quarter-gross and one dozen sticks.

AN-DU-SEPTIC Colored is available in 24 colors. In boxes of one gross, twenty-four and one dozen sticks.

AN-DU-SEPTIC Sight-Saver for children with defective or sub-normal vision. Piercing yellow color. In boxes of one gross sticks.

**BINNEY & SMITH CO.**

**NEW YORK 17, N. Y.**

Branch Offices: Chicago • Philadelphia • San Francisco • Danvers, Mass.



the experiences of the doctors. Society is better off because of all the things these groups have done toward professionalization of their vocations.

But as far as the school superintendency is concerned, is it not still in the same stage as the medical profession in the days when the would-be doctor learned through the apprentice method by working with an experienced physician?

A study of course offerings shows that professional schools vary greatly as to what they consider basic in the professional background and preparation of the superintendent. There must be a specialization which is called for in the person who would serve as a superintendent, even though there may be no such thing as a profession of school superintendency.

#### Leadership Defined

The brochure, "Educational Leaders—Their Function and Preparation," asserts that the "Essence of good leadership is something that is a part of the executive as a person—his mental and emotional make-up.

"He is a person with vision. Vision comes from knowledge, experience, imagination. It can be cultivated. The administrator can develop his power to rise above details, transcend local traditions, achieve skill in formulating many hypotheses.

"He is skilled in using democratic techniques of group action. He does not use his prestige to push things through. He uses his position to help faculty and lay groups examine a variety of proposals and shape proposals of their own.

"He fosters atmosphere in which leadership by many can flourish. If he is optimistic, others are likely to be. If he shows other persons he thinks they are important, they tend to think so. If he withholds judgment until facts are in, others may do likewise. If he expects good ideas to come from almost anywhere, they do come.

"He is a talent scout and coach. He is in a position to discover persons with ideas, with special skills, and talents. He develops them. He deliberately helps his colleagues to become leaders of groups. He provides enterprises in which many persons can learn the techniques of good leadership relations."

These attributes properly belong to the master teacher. And they are needed as part of the professional competencies of the superintendent. This suggests the background out of which the superintendent is to come and raises the question whether one can ever really be a good superintendent if he hasn't learned the techniques of the master teacher.

#### More Questions

Granting the attributes above, other questions come up. Answers to these questions are important in determining the professional status of the school superintendency.

1. Which of the professional competencies of the superintendent can be taught, and which must be experienced?

2. Can the essential learnings, skills, and attitudes be organized so as to be incorporated into courses and learned effectively?

3. In what respect and to what extent can knowledge and experiences of a prospective superintendent of schools be short-cut through study, systematic teaching, and systematic course work?

4. Must the superintendent have any considerable body of knowledge in teaching methods, school finance, school buildings, sanitation, school law, school organization, school administration, property management, public relations, government, growth of civilization, literature, history, sociology, psychology, the humanities, testing, and so forth?

A systematic analysis of the superintendent's job would reveal the qualifications required. Once this is done, the experiences and understandings needed to develop these qualifications should be determined.

Some progress has been made along these lines. Schools of education have made significant contributions. Our professional organizations have recognized the problem. And certainly superintendents have felt the need for better preparation and for additional specialization.

It is high time we move in the direction of setting up definite qualifications for the superintendent. Once these are determined, legislation should be sought to give them emphasis.

THREE hundred high-school seniors in Mt. Vernon, New York, have organized an "Our Town" club. They meet monthly to learn about a department in the local community government or to

study a local event of unusual interest. The club also invites citizens to come to the school to see what's going on there. Thus, the city administration and schools are closely tied together through the work of this club, and the students get a realistic approach to their roles as citizens. Once a year the city officials, including the board of education, turn over to club members for one day the running of the various city departments. . . . Metropolitan School Study Council Exchange

SM-30B

# Amazing New Development in Portable Sound Projectors



**Actual Lift-up Weight Only 20 lbs.!**

The projector and amplifier unit alone of the new Ampro Stylist weighs only 20 lbs. A young girl can easily lift it up to place on stand or table. Lift-off case with speaker and accessories weighs less than 9 lbs.!



The Ampro Stylist \$325.

complete including lens for microphone and phonograph



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Complete one-case unit, including projector, amplifier, lift-off case with speaker and accessories, weighs less than 29 lbs!



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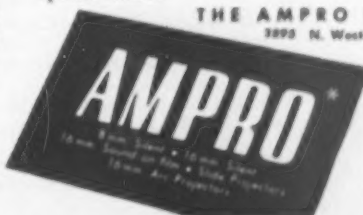
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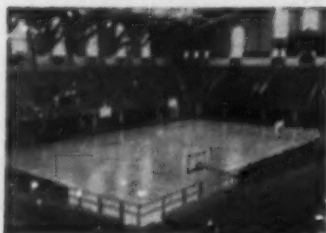
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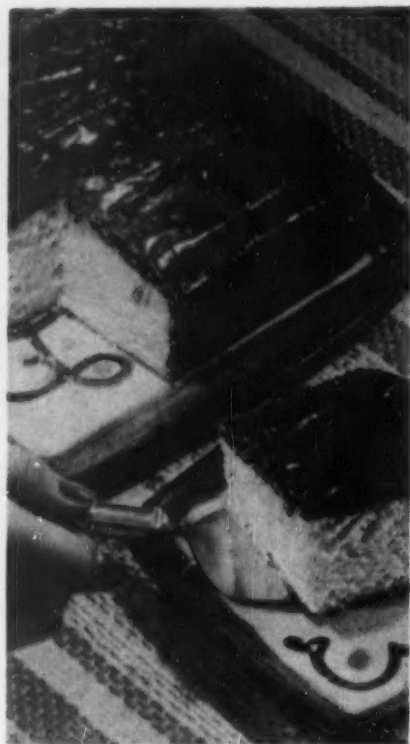


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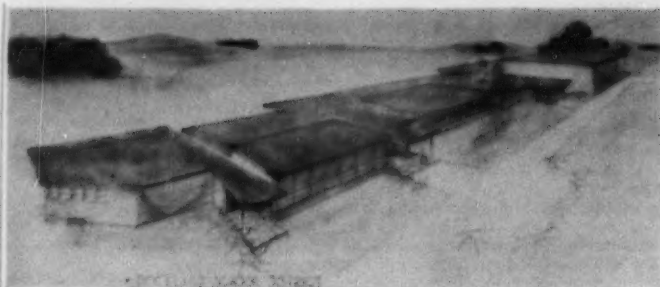
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## ROCKLAND'S NEW SCHOOL HAS LATEST IN CLASSROOM LIGHT CONTROL

THE 455 pupils who will occupy the new \$300,000 South End School this fall in Rockland, Maine, will not study under the handicap of inadequate classroom lighting—long the complaint of many parents in numerous communities.

The one-story, 16-room structure of 380 feet—one of the most modern in the East—was designed to provide a maximum of light control through reflection.

To accomplish this objective of Rockland school authorities and Eaton W. Tarbell & Associates, Bangor architects, many of the walls on two sides of the long building are of glass. Interior colors were carefully selected to reflect the light.

Above the high windows, light directional glass blocks extend to the roof. These blocks direct the light to the ceilings and allow it to be reflected downward in the classroom.

Classrooms on the northwest side of the building obtain additional light from a continuous clerestory of glass blocks.

To further effect a maximum of lighting, there are fluorescent lights in the two subprimary rooms and 13 classrooms, arranged to provide a minimum of 30

foot-candles. Corridors have incandescent lights.

Interior cabinets and finish are of gum plywood.

Heat will be furnished by an oil-burning, steam vapor system. Temperatures and ventilation are controlled automatically by a system which introduces air from the outdoors and passes it over steam-heated coils.

The roofing is of tar and gravel supported by steel framing and steel roof decking. The roofing material is bonded for 20 years. There is no basement, but the foundations consist of concrete footings below the frost level, with foundation walls of reinforced concrete extending up to the window level.

Floors are concrete, covered with asphalt tile. All toilet rooms have ceramic tile floors.

The building has a volume of 342,000 cubic feet. The contract price is roughly 70 cents a cubic foot.

Teacher's rooms, a health room, principal's office, reading room, janitor's room, storage and transformer vault, are included in the new building.

## A DAY IN MODERN INDUSTRY



Assistant plant manager, Howard Estabrook, and group leader, Helen Ellis, discuss a shipping problem with their counterparts for the day, students Henry Spritzer and Mildred Lawrence

**J**OHNSON AND JOHNSON, surgical dressings manufacturers of New Brunswick, New Jersey, is said to be the first major concern in industrial history to give high-school seniors responsible positions, from

chairman of the board to clerks, and let them "run the business" for a day.

Recently more than 300 teen-agers from the public and parochial schools of the town moved into the plant and worked at jobs of their own choosing.



This gave them a chance to consider this type of work and was a definite help to them in the choosing of future vocations. Each student was assigned to a supervisor and worked with him and other colleagues through the day. General student and faculty reaction to this project was enthusiastic. The company hopes to give seniors in future years the same opportunity to see the American free enterprise system at work from similar closeups.

"If throughout the country industries would let the nation's youth be a part of modern industry for one day, millions of the citizens of tomorrow would have a new concept of the vital role that management plays in making possible our present high standards of living," says General Robert Wood Johnson, chairman of the board of Johnson and Johnson.

### Recent Prize Winner



The picture "Oompah!"—above—won a prize for Bill Blankenburg, Bereaford, S.D., high-school student, in the fourth annual National High-School Photographic Awards conducted by the Eastman Kodak Company

### School Plant and Education Program

**T**HE development of comprehensive, cooperative plant programs that satisfy current and anticipated future needs requires time. Adequate comprehensive planning is economical.

School officials who foresee school plant improvement programs should begin their long-range advance planning now. It is not necessary to wait until funds are voted. The plans can have some flexibility and may be adapted as needed. However, combined school and community advance planning often arouses enough interest to help provide essential funds. Hurried or expedient planning is usually costly for the services rendered.

Building costs are high and planning should be realistic. It is unwise to plan a million-dollar building on a thousand-dollar income. However, advance planning and development of improved building facilities cannot wait until the times are propitious. Children are here, more are coming. These children "pass this way but once." We cannot afford to ask them to wait until conditions are right, until prices come down, to obtain the educational advantages which are due them, and at the ages or stages of development for which the various educational levels are planned.

It will, of course, be wise to build economically and to avoid waste. Needed improvements cannot be delayed indefinitely. The American people as a whole provide funds to purchase the material things they most want. Parents are going to want adequate school plants. Good schools will cost money, but such money wisely spent is an investment in the future welfare and sufficiency of the youth of today. Our local, state, and national resources are vast. Singly and together they are ample to support a modern pro-

gram of education with adequate housing for all of the youth of the nation. A part of the task of administrators in advance planning may be the seeking of or the development of sources of needed revenues. . . . From a speech at a recent AASA meeting by N. E. Filer, Office of Education.

**B**Y THE END of 1953 nearly 18,000,000 television receiving sets will be in operation.

**W**HAT college should I attend? One high school newspaper helps students in making that decision.

Each issue of *The Canary*, student publication of the Allentown, Pennsylvania, High School, carries a column "Know Your College." In it various colleges are discussed and analyzed as to tuition fees, entrance requirements, courses offered, proper admission authorities, nature of the campus atmosphere, and other generally useful information.

The near-to-home schools, likely to be of the most assistance, receive the most emphasis.

This informative column is probably motivating as well. In the setting of a lively, readable school newspaper, it may make college-minded students who might otherwise end their academic careers with a high-school diploma.

The biweekly *Canary* is an excellent example of secondary-school journalism. It is printed in the school print shop.

# Electric cooking means good cooking

"Teachers want their home

economics students to be good cooks.

Therefore, instruction must be based

upon modern equipment, which

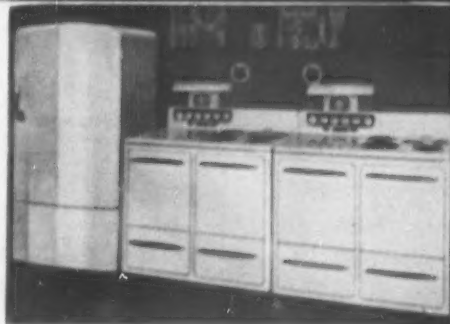
should include Electric Ranges,"

says Miss Dorothy Freland, Home Economics Instructor, Hanover-Tobacco High School, Hanover, Ohio.



A recent questionnaire to home economics departments indicates that over 80 per cent of all schools covered now teach modern Electric Cooking.

The reason for this teaching trend is easy to understand. Surveys of leading national magazines show that homes in every section of the country are installing modern Electric Ranges. Home economics students naturally want to use in school the same type of equipment they have in their homes. If the home economics laboratory of your school is not yet equipped with Electric Ranges, or if those you have are not modern, consult your local Electric Service Company or electrical appliance dealer.



Modern Electric Range installation in the Home Economics Laboratory of Hanover-Tobacco High School, Hanover, Ohio

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Please send me, absolutely FREE, four plain blueprints of the Hanover-Tobacco High School home economics laboratory kitchen illustrated on this page.

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## Ohio Teacher Situation

IN Ohio, at the high-school level, prospective teachers far exceed the demand, except in a few special fields. Diplomas were awarded in June to 3,283 young Ohioans trained for high-school work, to fill an expected need for only 1,700 secondary-school teachers. Only in business education, music, home economics, agriculture, and girls' physical education do officials expect shortages.

But under a new provision, those trained for secondary-school jobs may qualify for elementary positions if they take required extra courses during summer terms. Many "postgraduate" teacher trainees completed part of the extra work during the recent summer term, and will teach the 1949-50 term under a "provisional elementary cadet certificate." They will complete the extra work in a

second summer term, or "on-the-job" under supervision of a near-by college.

On a state-wide average, the median salary for high-school teachers is \$500 higher, but that's because elementary teachers cannot command full salary without a college degree, and only 59 percent of Ohio's elementary teachers have a degree. Most of the current need for grade-school teachers is centered in suburban areas near cities where salaries are generally higher.

## New Officers and Office



Edward M. Tuttle

THE National School Boards Association now has its headquarters at 450 East Ohio Street, Chicago 11, Illinois, and a full-time executive secretary, Edward M. Tuttle. He was formerly editor-in-chief for Row, Peterson and Company, educational publishers. A graduate of Cornell and a member of its department of rural education, he edited the Cornell Rural School Leaflet. He traveled extensively among New York State schools, spoke at educational conferences, and taught teachers in the summer sessions at the University. He was editor-in-chief of a 10-volume encyclopedia of rural life, and conducted a monthly department for boys and girls in *The Rural New Yorker*. During this period he served on the local school board for two years as its president.

Mr. Tuttle is active on the education committee of the Illinois Chamber of Commerce, and on the Advisory Committee on Education in Illinois. The combination of rural and urban background, with both professional and commercial experience, contributes to his understanding of school problems and the role of public relations in educational affairs.

## No Neglect Here

THE THREE R's are not neglected for social studies. According to Willard E. Givens, executive secretary of the NEA, the amount of time spent in schools today on the three R's is four times as great as it was a hundred years ago. He also stated that there has been a marked advance in the teaching of arithmetic, writing, and spelling.

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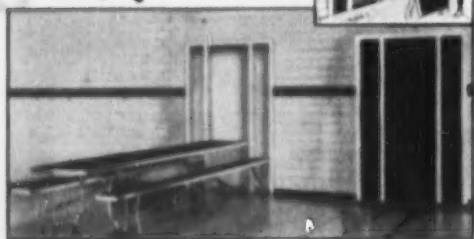
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## Financing School Building Programs

By EDGAR L. MOEPHET  
Chief, School Finance,  
U.S. Office of Education

From a talk at the  
Philadelphia AASA Meeting

**A**N INCREASE of approximately 7,500,000 more children in the public elementary and secondary schools in 1958-59 than in the current year is anticipated, according to the Bureau of Census. Allowing 30 pupils to a room, this means that 250,000 additional classrooms must be provided during the next 10 years to care for increased enrollment expected in grades one to twelve.

Approximately four-fifths of these facilities will be needed for pupils in grades one to eight; one-fifth in grades nine to twelve; or about three-fifths for grades one to six inclusive, and nearly two-fifths for grades seven to twelve inclusive.

In addition, with the growth in kindergartens and junior colleges that may well be anticipated, we may expect 1,200,000 additional students in these groups. On the basis of 30 pupils per room, which is higher than standard practice, we find a coming need of 290,000 classrooms during the next 10 years. Facilities for general and special services will have to be provided also.

### \$25,000 Classrooms

A \$25,000 average per classroom unit, including all facilities, seems a relatively conservative estimate of building costs for many parts of the country under present conditions. And there is no reason to believe this figure is likely to be much lower. This means that approximately \$6,250,000,000 will be needed to provide the necessary public school grade-room facilities, and another \$1,000,000,000 for kindergartens and junior high schools, thus making a total of \$7,250,000,000 altogether.

And this does not include renovation or modernization of existing facilities. Studies in some states show that new or renovated facilities will have to be provided for at least one-third of the present enrollment in the next 10 years. This is equivalent to 155,000 additional classrooms and related facilities at \$25,000 per classroom unit, or an additional \$3,875,000,000. This brings the needed total to \$11,125,000,000. Even if there were a 20 percent drop in building costs, \$9,000,000,000 would still be needed. Financing costs of bonds for these funds would add from two to four billion dollars more.

Some of the most important questions that must be answered by local school systems during the next few years, if these problems are to be solved satisfactorily, are as follows.

### Six Lively Questions

1. What can be done about artificial boundary lines that impose unnecessary handicaps to the proper development of the school program?
2. How can school population trends and movements be most satisfactorily determined?
3. What can be done about state limitations and restrictions which tend to interfere with desirable local responsibility and handicap local initiative?
4. What is likely to happen to school construction costs, and how will trends affect the problem of providing adequate facilities?
5. What steps can be taken to assure adequate school plant planning in view of all the factors that must be considered?

6. How can school plant construction best be carried out in view of all the existing difficulties?

It seems evident that at least the following steps will have to be taken by local school systems, if many of these problems are to be solved satisfactorily:

1. All school systems must plan for better studies of their school plant needs than ever before, considering population trends, the education program, existing plant facilities, the financial resources, state

restrictions, and widening of existing boundary lines.

2. Such studies must be more definitely cooperative in nature than they have been in the past. They should involve teachers, principals, lay citizens, other communities where boundary lines have to be changed, and the state for assistance in planning and carrying out these studies.

3. All school systems in which construction programs are to be undertaken will need the services of school plant special-

ists. State help will be required here.

4. Increasing emphasis should be placed on the eventual development of at least partial pay-as-you-go plans. School systems cannot continue indefinitely to finance their plant needs exclusively through bond issues which add from one-fifth to one-fourth to the school building cost.

5. All school systems will need to learn how to obtain consultative services and utilize them effectively. Consultant serv-

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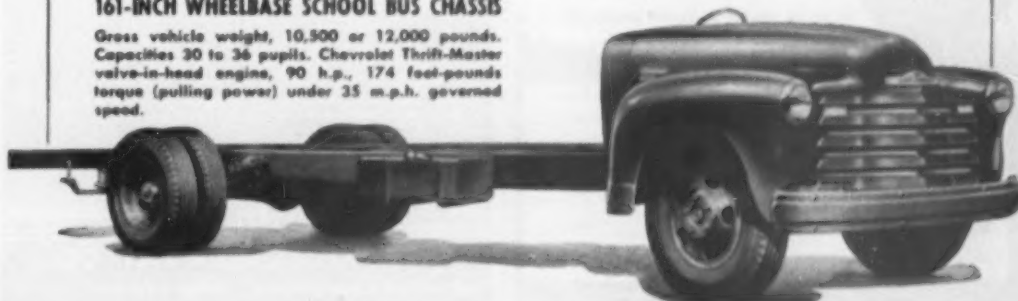
### 161-INCH WHEELBASE SCHOOL BUS CHASSIS

Gross vehicle weight, 10,500 or 12,000 pounds. Capacities 30 to 36 pupils. Chevrolet Thrift-Master valve-in-head engine, 90 h.p., 174 foot-pounds torque (pulling power) under 35 m.p.h. governed speed.

### NEW

### JUNIOR SCHOOL BUS CHASSIS

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## Financing School Building Programs

(Continued from page 25)

ions will be needed for surveys or studies, planning the location of school centers, planning buildings, developing financial plans, and in other phases of the program. Some services can be obtained through state departments of education, or through universities.

Many problems now being faced cannot be solved unless the states recognize and

plan to meet their basic responsibility for taking such steps as are necessary to assure an adequate program of education. This includes school buildings for all school systems. States will have to face and work out solutions for such problems as these:

1. How can the existing unsatisfactory school district boundaries best be revised

so as to assure organization of local school systems of adequate size?

2. What revisions should be made in constitutional and legal restrictions that handicap local school systems in their efforts to provide adequate school plant facilities?

3. How can the state financial program best be revised to assure sufficient assistance for all phases, including school buildings, to enable all properly organized school systems to meet their needs?

4. How can competent specialists and adequate consultative assistance best be provided to serve local school systems?

A study of the situation confronting the various states leads to the following conclusions:

1. In many states a large proportion of the local school districts must be reorganized if they are to be of sufficient size to meet their basic responsibilities satisfactorily.

2. Many state limitations and restrictions will have to be revised. Procedures must be worked out for relating bonding capacity to actual, not assessed, valuation.

3. State aid systems must be developed to provide for meeting school plant needs of the various local school systems.

4. Provisions should be made in all states so that school buildings can be constructed where needed and as needed in all local school systems.

### More Problems

Federal interest in school plant construction up to the present has been sporadic and inadequate to help the states and communities to meet their needs on a long-time basis. The following problems must be faced:

1. How can the federal government best cooperate with the states and local school systems in planning and carrying on studies to determine their needs, problems, and abilities?

2. How can the federal government best provide the information and consultative services which can be most effectively utilized by the states and local school systems?

3. What financial assistance should be provided by the federal government, if all states are to be in position to meet their school plant needs satisfactorily?

4. How can the federal government best avoid the confusion and conflicts in philosophy which have been evident in the past, and develop an effective program of assistance to the states?

5. Should the federal government ever deal directly with local school systems, or should it always deal with and through the states on problems involving the school plant?

The facts available seem to indicate that the federal government should plan now to take such steps as these to help to solve these problems:

1. It should develop a cooperative plan for assisting state and local school systems to determine their needs, limitations, and abilities.

2. In addition to providing general aid for current expense, the federal government should embark on a systematic and definite program of aid to the states which will enable them to assist all communities in meeting their school plant needs.

3. The federal government should expand its school plant consultative services in

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\*Test models were purchased on the open market by the United States Testing Company, Inc.

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the Office of Education to meet the rapidly increasing needs and improved plans for making these services available.

4. As stated in the policies adopted by the National Council of Chief State School Officers, all relationships of the federal government should be with and through state educational agencies rather than with local school systems. This policy should be clearly stated and observed at all times as a means of avoiding conflicts and confusion.

## Teacher Education Educates Community In Mexico

By ANN SCARLETT COCHRAN  
Morris Brown College, Atlanta, Georgia

Condensed from  
*The Journal of Education, Boston*

A FUNCTIONAL PROGRAM of education which directly attacks major community problems is in effect in the Palmira Normal School in Mexico. It cuts across well-accepted, traditional policies and teacher-education practices of other countries and goes directly to the roots of the problems of Mexico in health, illiteracy, and making a living.

In addition to education courses and Spanish, the curriculum includes courses in health, agricultural practices, and trades. The rural teacher must be capable of utilizing the rural environment for cultural purposes and of relating his formal school program to the daily habits and labors of the people.

The school is really a field laboratory in rural reconstruction. Students go into the surrounding communities in campaigns on health, literacy, agriculture, and so forth. They are taught to take advantage of native resources in materials and culture. One of Mexico's great schoolmen, Rafael Ramirez, pounds home the fact that "we are more interested that our population be cultured, taking the word in its precise acceptance, than that it should be learned."

### Partly Self-supporting

The Palmira Normal School is a partially self-supporting boarding school. Students raise and prepare all the food that they eat. The government pays all the expenses of students in the school, including the cost of clothing, food, shelter, and medical attention. Students are given four pesos a month for "spending change."

Approximately 200 students attend this coeducational school. There is a vast majority of girls. Pupils, usually the children of peasants, are considered "wise men" after their graduation and return to their communities as teachers.

Training lasts from one to three years, with the best students being kept for the third year. Enrollment is limited to those who have completed the sixth grade, but students from the fourth grade are admitted if they show promise in common sense and leadership.

The school has a ten-month term. Students attend an institute for one of their free months and then have a vacation for the other.

Graduates get further in-service training through the work of the cultural missions. This enables them to perfect many of their skills.

A director heads the faculty, which is composed of a physician, a woman in charge of boarding students, an agriculture teacher, a teacher of education courses, instructors of general subjects, shop teachers, a physical education director, and clinical assistants.

There is a clean, comfortable main building. Its four sections are used for boys' and girls' living quarters, dining

room and kitchen, and classrooms. There are workshops for woodwork and the leather industry also. Bake shops and chicken coops are on the grounds.

The school is located in a rural setting so that students may have community experiences. Because they were originally carefully selected on the basis of leadership, common sense, and residence in the community they serve, all graduates are sure to be employed as rural elementary and secondary teachers in Mexico.

## On Choosing a High School

"**K** NOW Your High School" says the New York City Board of Education to elementary and junior high-school graduates in an enticing new booklet of that name. First, pupils are given some important things to think about—such as plans for what they want to do when they grow up, the kind of an education they want, what to do if financial difficulties threaten an end to schooling,

and what kind of high school they wish to go to. Pupils can use the indented, black-and-white striped index to look up information on academic high schools, special academic high schools, vocational high schools, and specialized vocational high schools.

Parents are advised to help the child in carefully selecting the proper school and course of study. And they are given tips for helping the pupil to get the most out of high school.

BM-33B

**NOW!!!**  
**a still better**  
**WEAR-EVER**  
**aluminum kettle**

**WITH SANITARY, APPROVED DRAW-OFF**

Two Kettle styles to choose from  
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REGULAR

This new, tangent draw-off has been approved by one of the most exacting sanitary groups in the country—the New York City Board of Health.

The draw-off, being on a straight tangent to the



kettle is easily and thoroughly cleaned. The valve is quickly dismantled into 3 simple parts for cleaning.

This is the same Wear-Ever kettle that is so famous for its fast, even heating and cooking—and for its many sanitary and mechanical features. Now still further improved by the addition of a tangent draw-off. For further information see your supply house representative or mail the coupon to:

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The Aluminum Cooking Utensil Company  
4808 Wear-Ever Building, New Kensington, Pa.

Please send me information regarding your aluminum steam-jacketed kettles with new tangent draw-off.

NAME

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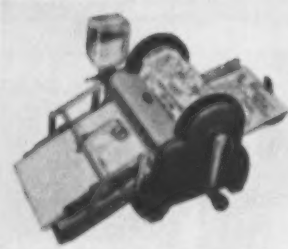
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CITY  STATE

# SCHOOL SUPPLIES AND EQUIPMENT

**NEW PRODUCTS**  
and news about established products  
presenting the claims  
made for them by their manufacturers

Consult the Readers' Service Listing on opposite page. Send the postcard for further information. No charge, no obligation.



**SM-400B Liquid Duplicator**  
Schools needing a dependable, easy-to-operate, low-priced duplicator will find it in the new model, Economy Copy-rite liquid duplicator made by Weiber Duplicator & Supply Company. The incorporated fingertip controls, simple design, and ease of operation enable anyone to obtain vivid, workable copies, delivered face up. Outstanding features of the machine

are easy loading of the copy paper and positive automatic paper feed. This sturdy duplicator will handle paper and card stocks from postcard size to 9 x 14 inches.

**SM-401B Electric Hedge Trimmer**  
School grounds can be kept neat and well trimmed with the new electric hedge trimmer produced by Electric Sprayit Company. Two hardened steel, 11-inch cutting heads, mowing in opposite directions, cut fast and clean. The adjustable cutting head is self-locking into three positions for forward, angular, or side trimming. An auxiliary, built-in handle can be swung out at right angles from either side to give the operator a two-handed grip when needed. By use of a carrier and 4-foot handle attachment, this machine can also be used for ground and overhead trimming.

**SM-402B Pottery Casting Rack**  
Chipping of pottery is prevented by the new casting table rack, model CT-

16, produced by A. D. Alpine. Top casting rack is made of 1-inch, number one wood crossmembers. There is a special aluminum waste tray beneath to catch the excess slip. Both racks are removable for easy cleaning. They are built to be as nearly corrosion and contamination-proof as possible. Size of this durable table rack is 8 x 2 feet x 32 inches high.



**SM-403B New Luminaire**  
The efficient Trucolite reflector design is now used with new Slimline lamps to get the maximum out of these efficient light sources. Edwin F. Guth Company makes the new luminaire in two easy-to-handle, 4-foot sections.

One man can make the installation. Luminaire may be used as open unit, with shielding eggcrate louvers, or with diffusing glass panels.

**SM-404B Trash Hatch**  
Convert open waste receptacles with the new TrashHatch made by W. T. Pettit & Sons. This is a heavy, flanged lid with integral hood and gravity door. It provides an effective smothering seal against fire in paper, oily rags, or other inflammable waste. Since the user must push waste through the door, disposal becomes an orderly procedure which leaves the floor around the receptacle uncluttered.



TrashHatch sits securely of its own weight, or may be permanently fastened. Construction is of heavy steel welded into a single unit. Weight is approximately 15 pounds.

**SM-34B**



**New Sectional Grand Stands**  
*Factory Built - Low Cost!*

**Write for Free Folder!**  
Plan new grand stands or increased seating capacity the Kerrigan way. Many schools have erected these factory-built permanent steel grand stands at a great saving in cost. For complete information, write for catalog 13-E.

A Few Territories  
Still Available

SECTION D, ENGINEERING DEPARTMENT

**KERRIGAN IRON WORKS, INC.**

NASHVILLE

TENNESSEE

**SM-35B**

**NOW READY...**  
**A Buying Aid for Every Teacher and Administrator!**



The new book, **HOW MANY, HOW MUCH**, is the authoritative answer to all questions regarding school art and craft materials. It tells you **How Many** you need (per pupil and classroom requirements), **How Much** they will cost and **How to Use Them**. This veritable "handbook of art education materials" includes many new and varied techniques; also special chapters on promoting School Art Programs and managing Exhibits and Displays.

**SEND 30c for HOW MANY, HOW MUCH**  
An Indispensable Time-Saver!  
Dept. SM-13

the **AMERICAN CRAYON COMPANY** Sincerely, This  
NEW YORK NEW JERSEY CHICAGO



**SM-405B Mopping Tank**  
There are no screw holes to rust or leak in the bottom of the improved mopping tanks made by Geerpres Wringer, Inc. Holes for attaching casters are eliminated by using a heavy spring lock which goes under the head of each caster nut and over the head of the tank. This locks tank securely on the caster spider. Locking corners on the clip prevent any loosening in service.

Tanks are hot dipped galvanized after fabrication. They are available in standard 32 and 44-quart sizes. Other capacities may be specially ordered.

**SM-406B Fluorescent Lamps**  
Fluorescent lamps that will last an average of 6 years in schools are now made by Sylvania Electric Products, Inc. They permit a reduction in lamp failures which cuts replacement costs by two-thirds. Average life rating is 7,500 hours on a 3-hour burning cycle. These lamps remain bright and clean for up to 5,000 burning hours. Formerly discoloration and a drop in efficiency could be expected with 1,750 hours of burning. (Turn to page 30)

**SM-36B**

## THEATRICAL FABRICS by DAZIAN'S INC.

THE WORLD'S OLDEST AND LARGEST THEATRICAL FABRIC ORGANIZATION • ESTABLISHED 1842

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FOR INFORMATION OR SAMPLES WRITE OUR OFFICE NEAREST YOU:  
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WRITE FOR FREE  
BOOKLET "WHAT  
FABRICS CAN DO  
FOR YOUR SHOW"



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2258—Let Music Ring!  
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See 16 mm sound film, 28 minutes in full color **Free!**

A new film, "GOOD THINGS HAPPEN OVER COFFEE," that fosters understanding of our Latin-American neighbors.

See Latin-Americans at work and play in picturesque surroundings; breathtaking scenic views; the coffee story from seed to cup—the foundation of our Latin-American trade—the cup of friendship among Good Neighbors.

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New **HISTORY FILMS**: "Johnson and Reconstruction," and "Winning Our Independence," (from Teaching Film Castilians).

Over 1500 titles available, including excellent features, cartoons, and comedies.

Write for our new, 1949-1950 Catalog of **SELECTED MOTION PICTURES**

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SM-38B

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- Easy to operate
- Compact
- Balanced construction
- Sturdy



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PREPARED GLAZES  
CLAY BODIES**

WRITE FOR DETAILS AND PRICES

**Drakenfeld**  
P. O. BOX 100, NEW YORK 100, N.Y.

**SM-407B Metal Tennis Court Tape**  
Reduction of tennis court maintenance costs is possible with the new Polymore metal tape, made by Robert Moore. This is a white, coated tape with a hard surface easily cleaned by brushing. It is coated on both sides. Reversing it each year prolongs the life of the coating.

Tapes are fastened to the court with special nails staggered along both edges. Nailed in this manner the tape

hugs the surface of the court and any slight stretch is ironed out as the court is rolled. These tapes can be left out all year around regardless of weather conditions. Cost of tapes and nails is reasonable.

**SM-408B Splint Window Shades**  
Incoming light can be controlled by rolling up the bottom and lowering the top of the new Ra-Tox wood splint ventilating window shades made by

Hough Shade Corporation. New feature of this long-wearing shade is the horizontal rail. This allows the top section to be lowered to admit more light to far corners of large rooms. Shades are made of a "fabric" of basswood splints and fishnet twine, with narrow spaces between the splints which permit passage of a small amount of diffused light. Air from opened windows can also pass through these spaces, creating a draft-free ventilation.

## SCHOOL SUPPLIES AND EQUIPMENT

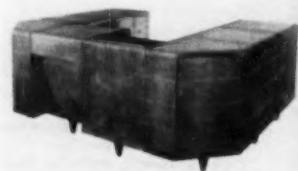
(Continued from page 28)



**SM-409B Football Line Markers**  
Safety and long-range visibility are outstanding features of the new Voit football yardage line markers. They are made of long-wearing black rubber, with washable, white fabric numerals molded into the face. They bend or collapse under weight before injury from contact is possible.

These serviceable markers have built-in carrying grips. They are flat and easily assembled and disassembled.

**SM-410B Cotton Acoustical Tile**  
In auditoriums, classrooms, and cafeterias where acoustic correction is needed that will not deaden the interior for speech or music, the National Cotton Council recommends use of cotton acoustical tile. This tile represents a new principle of sound control. The decorative, 12-inch-square units weigh only 3 ounces. They are flameproof and verminproof. Low cost installation is possible.



**SM-411B Library Furniture**  
Modern sectionalized construction is featured in New Life library furniture built by the John E. Sjoström Company. This gives flexibility, variation, and wide choice in types of units and their arrangements. Design is characterized by flat planes, smooth surfaces, and rhythmic natural grain finishes. Furniture is made in a variety of woods, including birch, maple, and oak. The line includes shelving, racks, and cabinets; dictionary stands and tables; and charging desk units with durable, color-selected linoleum tops which help reduce eyestrain.

SM-42B

**SCHOOL DOOR PLATES**  
In Etched Brass 7 1/2" x 1 1/2" ONLY 75c ea.

Large polished brass letters on deeply etched black ground. Easy to read, durable and dignified in appearance. 75c each in any quantity. Hundreds of titles for schools. Write for list. A few titles listed below.

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**THE HOFF METALCRAFT**  
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**UNIFORM**  
**FABRICS**

Standard fabrics for over eighty years

**349 and 301 SERGES**  
and  
**671 WHIPCORD**  
in every desirable uniform color.

"ALL WOOL" Worsted Fabrics that stand up, in colors that stand out. The Metcalf "know-how" adds that final touch of dependable quality and smooth finish that makes these cloths ideally suited for school and organization uniforms. Sample brochure upon request.

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**QUICKLY FOLDS OR UNFOLDS** for changing ROOM USES

**Mitchell FOLD-LEG tables**

**MORE** seating capacity  
**MORE** leg comfort  
**MORE** exclusive features  
**MORE** strength and rigidity  
**MORE** for your money

Churches, schools, hotels, institutions, fraternal buildings. Convert any room into a banquet or group activity room. Clear it in minutes.

Send for folder with complete specifications.  
**MITCHELL MANUFACTURING COMPANY**  
2730 S. 34th St., Milwaukee 7, Wis.

**THE STRONGEST, HANDIEST FOLDING TABLE MADE!**

**Clarín**  
**STEEL FOLDING CHAIRS**

Scientifically designed  
Beautifully finished  
Sturdy as an oak

Clarín Folding Chairs are functionally designed to afford restful, relaxing seating. Rubber feet prevent noise, scratching or marring. Thousands of users have found Clarín Chairs the most economical—the most practical—in the long run.

Available in Golden Bronze or choice of assorted colors. Buy with confidence from Clarín—the Originators of the Steel Folding Chair.

replaceable rubber feet always available

**CLARIN MFG. CO.**  
6440 West Harrison St., Dept. C-9  
CHICAGO 44, ILL.

Best and most reliable steel folding chairs in institutional service than any other.

**SM-412B — Non-Slip Floor Polish**  
Falls due to slippery floors can be avoided by use of the new Trafco, produced by Walter G. Legge Company, Inc. With its hardwood and gymnasium floors can be polished to a non-slip, high sheen that is exceptionally resistant to scuffing, traffic wear, and gymnasium play. Buffing produces an attractive sheen that is more non-slip than before the buffing. Ingredients in the Trafco formula loosen dirt so floors can be cleaned and repolished in one operation. Polish has a spirit base harmless to wood.



**SM-413B — School Bus**  
This new Chevrolet "Junior" school bus is excellent for transporting small groups of children on narrow roads or rural lanes. It carries 16 pupils. Bus has an outside width of approximately 80 inches and is mounted upon a 137-inch wheelbase chassis with single rear wheels.

## FREE CATALOGS AND BOOKLETS

Use the SCHOOL MANAGEMENT Reader's Service Listing on page 29 and the postcard. Indicate key numbers of booklets which you desire.

**SM-450B — Beckley-Cardy Company** recently issued a handsome, illustrated "School Buyer's Guide of Equipment and Supplies." This 1949-50 catalog includes practically every item needed by the school purchaser. Classroom, office, and library furniture is shown, as is a variety of chalkboards and shades. Visual education equipment, art materials, books, and teaching materials are included. Duplicating materials can be ordered from this catalog; the custodian can select his supplies, too.

**SM-451B — Armco Drainage & Metal Products, Inc.** offers an illustrated folder titled "A Quick, Low-Cost Solution to 'Classroom Squeeze.'" The solution lies in economical Steelux one-story school buildings. Shown are some typical floor plans which range from one to eight or more rooms. These permanent yet movable, fire and wind-resistant buildings may also be used as shops, cafeterias, gymnasiums, school bus garages, or other purposes.

**SM-452B — Bell & Howell Company** publishes "Schools Are What We Make Them," prepared in collaboration with the research division of the NEA. This attractive, 34-page handbook for citizens discusses evaluation of schools and the role of laymen in improving them. Clear writing, concrete suggestions, a comprehensive check list for citizen action, and a listing of sources of information all combine to make this booklet practical and valuable.

**SM-453B — Clebar Watch Company** offers a new catalog which describes its stop watches and chronographs. Included is a complete line of timers for all sports, laboratory, and industrial uses.

**SM-454B — Hussey Manufacturing Co., Inc.** describes school bleachers, grandstands, and gym seats in the new, illustrated booklet titled "Hussey Safe

Seating." Portable, semipermanent, and permanent equipment is presented and analyzed in terms of safety and economy.

**SM-455B — National Radiator Company** offers "Invisible Warmth," a new, illustrated bulletin which discusses installation of cast-iron convectors. Concealed by inconspicuous sheet steel enclosures, these convectors can produce both convected and radiant heat

in classrooms. Convectors for one-pipe steam, hot water, vapor, and vacuum heating systems are pictured and advantages given. The various enclosures described can be used free standing, flush, or partially recessed.

**SM-456B — Heywood-Wakefield** describes its movable, tubular steel school furniture in an illustrated catalog. Many special construction features which provide comfort, flexibility, and

durability are pointed out. Schedule of desk and chair sizes is carefully graded. Furniture is available in either light or brown stain finish.

**SM-457B — United Laboratories, Inc.** publishes a "Maintenance Checking Chart," a 6-page folder which contains an extensive list of products and services useful to maintenance men and supplies purchasers. Among the subjects for which maintenance infor-



The new RCA Victor "Eye-Witness" Television table model 9T270. A 16-inch direct-view Big Picture set. Ideal for the classroom.

# RCA Victor television— New eyes and ears for the classroom

CLASSROOM TELEVISION possesses tremendous potentialities as a valuable supplementary aid for the teacher.

Television is a new audio-visual tool that makes it possible to bring fascinating material and novel techniques into the school to enhance the acquisition of concepts and motivate learning. This new medium of sight and sound will open the door to significant innovations in methods of instruction.

Cooperative projects between schools and transmitting stations in areas where television is now available have resulted in many exciting events in the utilization of television in the classroom. These joint school-station projects

also give educators and schools the experience of providing parents and taxpayers in their homes with an opportunity to see and hear the work that goes on in schools.

Farsighted school systems and colleges are looking to the future when they can build their own television studios and transmitters and send their own programs throughout their school systems.

From camera to classroom receiver or to auditorium life-size television reception—RCA equipment will guarantee television at its finest. With RCA, television is a spectacular accomplishment . . . made possible by long research and engineering.

## To help you in planning for television!

Send for a copy of the 20-page illustrated RCA booklet "THE MODERN SCHOOL LOOKS AT TELEVISION." It is filled with interesting information on how television fits into the progressive school curriculum.

### MAIL COUPON—TODAY

• Educational Services  
• Radio Corporation of America  
• Camden, New Jersey

• Please send me free booklet "The Modern School Looks At Television."

• Name \_\_\_\_\_

• School \_\_\_\_\_

• Address \_\_\_\_\_

• City \_\_\_\_\_ State \_\_\_\_\_

EDUCATIONAL SERVICES

**RCA VICTOR**



DIVISION OF RADIO CORPORATION OF AMERICA, CAMDEN, N. J.



81-1



(Continued from page 31)  
mation is given are roofs, floors, stair treads, sidewalks, parking lots, play areas, waterproofing, metal, wood, and masonry surfaces, and insulation.

**SM-458B** — Oleon Manufacturing Company tells about the lusterizer glass washer in a new booklet titled "The 'Lusterized' Glass Entices Appetites."

This useful equipment removes lip-

stick and dull cloudy film with less hot water and about 50 percent less soap than is usually needed. It reduces glass breakage materially.

**SM-459B** — National Inter-Communicating Systems, Inc. publishes an illustrated folder describing the improved Convers-O-Call public-address paging and intercommunication system designed for schools. It can be used to broadcast lectures, recordings, radio

programs, or emergency instructions. Small schools with limited budgets will find this intercommunication system particularly suitable.

**SM-461B** — North American Trunk Manufacturing Company describes its multipurpose folding tables in a new catalog price list. Available in numerous sizes and shapes, there are many school uses for these sturdy, easily stacked tables.

## Check List Of New Publications

Use the SCHOOL MANAGEMENT Reader's Service Listing on page 29 and the postcard. Indicate the key numbers of books about which you wish further information. . . . If you wish to buy any of the books mentioned below write directly to the publisher. Please mention SCHOOL MANAGEMENT.

### For Administrators and Teachers

**SM-200B—Plant Maintenance Manual.** By Edward J. Clement and Carl C. Harrington. Conover-Mast, 205 East 42 St. New York 17, New York. 320 pages. \$3.50.

Here is a collection of concise, graphically illustrated articles published monthly in "Mill & Factory." They present excellent ideas to help prolong the life and usefulness of equipment and buildings; they emphasize preventive maintenance to lower repair and service charges; and they impress on manufacturers the need for simplicity in the maintenance of their products.

School men will be particularly interested in the chapters on the maintenance of lighting equipment, valves, traps and strainers, fire extinguishers, heating and air conditioning equipment, roofs, and floors.

**SM-201B—Guide for Evaluating School Buildings.** By Ralph D. McLeary. New England School Development Council, Peabody House, Kirkland St. Cambridge 38, Massachusetts. 52 pages. Price for non-members of the Council \$1; discount for quantity orders.

Brief but well thought out statements of criteria, a numerical rating device, and graphical interpretation of school building evaluations are provided. The author believes that the subtractive method of scoring buildings and the necessity of stating reasons for penalties should lead to greater definiteness of results.

**SM-202B—Wanted: 30,000 Instructors for Community Colleges.** American Council on Education, 744 Jackson Place, N. W. Room 403, Washington 6, D. C. 51 pages. \$1.

With the number of junior colleges, technical institutes, and community colleges constantly increasing, where are we going to get enough well prepared instructors? A committee headed by Lawrence L. Jarvie studied the problem and incorporated its initial findings here. A lengthy check list outlines the nine selected services for which instructors and institutions should be prepared. Among them are community services, counseling, and occupational education.

**SM-203B—Working Together for the World We Want.** Littleton Herald

SM-47B

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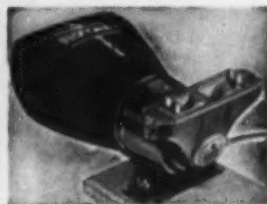
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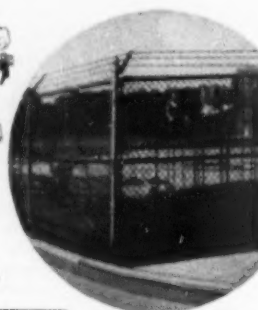
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Tribune, Forum Information Service, 230 West 41 St. New York 18, New York. 87 pages. 75c.

Proceedings of the fourth annual New York Herald Tribune Forum for High Schools.

**SM-204B—Virginia School Boards.** Department of Health, Commonwealth of Virginia, Richmond 19, Virginia. 82 pages. Free.

This manual was prepared for the guidance of Virginia school board members. It clarifies practices to be followed in the administration of school affairs and outlines board functions and policies. The state system of public instruction, the responsibility of the school board, and how to properly conduct a school board meeting are explained. One practical chapter is devoted to the status of the school superintendent, his duties, and his relationship to the school board.

**SM-205B—The Teacher's Technique.** Revised edition. By Charles E. Holley. Garrard Press, 119 West Park Ave. Champaign, Illinois. 360 pages. \$3.

A textbook to give the prospective teacher a general view of the field before special methods are studied.

**SM-206B—State Aid for Central Building.** By Wallace H. Strevell. Bureau of Publications, Teachers College, Columbia University, New York 27, New York. 109 pages. \$2.50.

Those seeking to solve the problems of providing objective formulas for state aid for school buildings will find this report of value.

**SM-207B—Speech Methods in the Elementary School.** By Carrie Rasmussen. The Ronald Press Co. 15 East 26 St. New York 10, New York. 340 pages. \$3.50.

The elementary school teacher will find this book helpful in handling speech problems that arise in the classroom. Topics of voice training, bodily activity, rhythm, and curricular correlation are given thorough consideration. Other major topics covered are speech improvement, minor speech correction problems, student talks of various kinds, and many others.

**SM-208B—Program Suggestions for Committees on Education.** Committees on Education, United States Chamber of Commerce, 1615 H. St. N. W. Washington 6, D. C. 23 pages. 10c.

Contains a brief summary of current school conditions. Ways to approach committee organization and an outline to survey the school system are given. A business-industry-education day is illustrated.

**SM-209B—Polio Can Be Conquered.** By Alton L. Blakeslee. Public Affairs Committee, Inc. 22 East 38 St. New York 16, New York. 31 pages. 20c.

The symptoms, treatment, and progress in research are told. Tips for parents and general precautions are included.

**SM-210B—106 Success Opportunities.** Arco Editorial Board. Arco Publishing Co. 480 Lexington Ave. New York 17, New York. 394 pages. \$2.50.

A comprehensive presentation of available careers. Duties of the career, how to get a start, what is needed, who should and who should not take up the work, where the work is located, earnings, and many other aspects are covered.

**SM-211B—Improving Human Relations in School Administration.** By

William A. Vauch. Harper and Brothers, 49 East 33 St. New York 16, New York. 299 pages. \$3.50.

Numerous concrete situations which arise in the relations of teachers and administrators are treated. The book stresses the importance of democratic leadership as opposed to autocratic command. The author discusses in detail such specific problems as teachers' meetings, curriculum planning, the several functions of the principal as a

group leader, and the resolution of conflicts with teachers and parents.

**SM-212B—Bibliography of Vocabulary Studies.** By Edgar Dale. Bureau of Educational Research, Ohio State University, Columbus 10, Ohio. Mimeographed. \$1.50.

Contains 1855 titles of published and unpublished vocabulary studies through 1948. Titles are conveniently arranged in 23 categories.

Some of the categories are: Methods of Acquiring or Increasing Vocabulary; General, Technical, Foreign Language; Vocabulary Testing; Size; Frequency of Appearance of Words; Vocabulary Grade Placement; Spelling Vocabulary; Development Studies of Vocabulary and Spelling; Vocabulary Contents of Books, Magazines; Studies of Specific Vocabulary, History and Social Studies, Foreign Languages, Mathematics, Science and Geography, Business. (Turn page)

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**SM-220B—Literature and Life in England.** Revised edition. By Dudley Miles and Robert C. Pooley. Scott, Foresman and Co. 433 East Erie, Chicago 11, Illinois. 822 pages. \$3.

Foremost writers of English prose and poetry are represented. Modern translations of masterpieces from the earliest English literature enable the

youth of today to comprehend the meaning of the original work.

The historical account of English literature is written in a style which the high-school student can understand. Contemporary and classical writers are represented. H. G. Wells, Joseph Conrad, Rudyard Kipling, John Masfield, and A. A. Milne are a few.

**SM-221B—Practical Television Servicing.** By J. R. Johnson and J. H. Newitt. Murray Hill Books, Inc. 232 Madison Ave. New York 16, New York. 334 pages. \$4.

This is an excellent source of practical, how-to-do-it information. The authors have an easy-to-understand manner in leading the reader from television fundamentals through the receiver as a whole. The chapters on

installation and trouble shooting emphasize do's and don'ts. Each chapter is supplemented by questions and answers and is replete with diagrams and illustrations. Theory is not stressed. This is an excellent textbook for specialized training.

**SM-222B—Modern Dance Techniques and Teaching.** By Gertrude Shurr and Rachael D. Yocom. A. S. Barnes and Co., Inc. 101 Fifth Ave. New York 3, New York. 191 pages. \$3.75.

This practical book is divided into three sections: Dance Warm-ups, Dance Exercises, and Dance Techniques. Photographs show single movements and illustrate explanatory material on opposite pages. Techniques selected are applicable to large and small classes, to all levels of student education, and to classes in corrective physical education. The material can be adapted to the interests of elementary school teachers.

**SM-223B—The Bright Design.** By Katherine B. Shipp. Viking Press, 18 East 48 St. New York 17, New York. 205 pages. \$3.50.

The story of electrical energy, and the men who have helped to unfold its secrets, is told in this interestingly illustrated book.

**SM-224B—Algebra—First Course.** By Raleigh Schorling, Rolland R. Smith, and John R. Clark. World Book Co. Yonkers-on-Hudson, New York. 406 pages. \$1.92.

One of the strong features of this text is that it combines full explanations and developments for meaning, and abundant drill for application and manipulation. Careful and extensive treatment is given to the development of a formula.

**SM-225B—Let Music Ring!** Edited by Peter W. Dykema, Gladys Pitcher and J. Lilian Vandever. C. C. Birchard and Company, 285 Columbus Avenue, Boston 16, Massachusetts. 256 pages. \$1.96.

Here are songs to meet the diversified requirements of the school music teacher—folk songs, arias of the master composers, songs for action, dance, games, and many more.

**SM-225B—The Psychology of Personal Adjustment.** Second edition. By Fred McKinney. John Wiley and Sons, Inc. 440 Fourth Ave. New York 16, New York. 752 pages. \$6.

In this new edition greater emphasis is placed upon the basic concepts of adjustment. A new chapter, "Development of Personality," and many new cases have been added.

College students with vital personal adjustment problems will find factual material for orientation in this basic text.

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## Check List of New Audio-Visual Aids

Use the SCHOOL MANAGEMENT Reader's Service Listing on page 77 and the postcard. Indicate the key numbers of films about which you wish further information. . . . If you wish to rent or buy any of the films write directly to the distributor. Please mention SCHOOL MANAGEMENT.

### Educational Films

Price—In some cases rentals vary, and where this is true the word "apply" is used. Send to distributor for rates. Where films are sent free, except for transportation charges, the word "loan" is used.



Professor Lightly and a fish eye each other, in "The Light in Your Life." See SM-300B

**SM-300B—The Light in Your Life.** 29 min. Sale—\$185. Loan—available from General Electric District Offices or General Electric Department Sales District Offices.

Professor J. Lumen Lightly, an amusing little character, emerges from a spare lamp bulb and with his magic fluorescent wand dramatizes laboratory know-how for pop-eyed, nine-year-old Nancy. He explains the salient points of lamp making and whisks Nancy on fascinating trips into the inside of an ordinary light bulb, to the ocean floor, up into the clouds, down into a coal mine, and behind the scenes at Nela Park, Cleveland, where bulbs are manufactured.

**R**KO Radio Pictures, Inc. 16mm. Educational Division, 1270 Avenue of the Americas, New York, New York, announces another group of films in its "This Is America" series. Three-year license—\$72 each.

**SM-301B—Glamour Street.** Deals with Fifth Avenue, New York, where styles and fashions for all the main streets in the country are set. 16 min.

**SM-302B—Friend of the Family.** Story of pet care and the large industry which has developed from the American family's love of pets.

**SM-303B—Who's Delinquent?** Focuses attention on juvenile delinquency.

**SM-304B—County Fair.** Goes behind the scenes and shows how a typical American farm family goes about its daily tasks.

**SM-305B—Girls in White.** Tells the story of the need for nurses and the training which a nurse must have.

**SM-306B—Berlin Powderkeg.** A documentation of the Berlin air lift.

**U**NITED World Films, Inc. 1445 Park Ave. New York 29, New York, presents two more films in the "Science Series." 1 reel each. Sale—\$45 each; rent—apply.

**SM-307B—The Crayfish.** The crayfish is examined in general terms. Functions of individual parts are analyzed, with attention on male and female reproduction, feeding, digestion, and arterial and nerve systems.

**SM-308B—Hydra.** The hydra is shown in its natural surroundings. Digestive processes and methods of reproduction are illustrated, as are the development and functioning of the stinging cells.

SCHOOL MANAGEMENT

**W**ORLD in Color Productions, Elmira, New York, has a series of films on American National Parks. 3 min. each. Sale—\$14.75 each, Kodachrome; \$4, black and white.

**SM-309B—Acadia National Park,** Maine.

**SM-310B—Big Bend National Park,** Texas.

**SM-311B—Bryce Canyon National Park,** Utah.

**SM-312B—Great Smoky Mountain**

**National Park,** Tennessee-North Carolina.

**SM-313B—Grand Teton National Park,** Wyoming.

**SM-314B—Crater Lake National Park,** Oregon.

**SM-315B—Kings Canyon National Park,** California.

**SM-316B—Lassen Volcanic National Park,** California.

**SM-317B—Mesa Verde National Park,** Colorado.

**SM-318B—Olympic National Park,** Washington.

**SM-319B—Rocky Mountain National Park,** Colorado.

**SM-320B—Sequoia National Park,** California.

**SM-321B—Zion Canyon National Park,** Utah.

**SM-322B—Coal Country,** 18 min. Sale—\$180, color; \$90, black and white.

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## CHECK LIST OF NEW AUDIO-VISUAL AIDS

(Continued from page 35)

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As coal is seen coming from a rich vein in West Virginia, the story of surface and underground mining is related. Formation of veins of coal is explained, as well as the importance of coal in the nation's economy.

**SM-323B—We Make Butter.** 1 reel. Sale—\$40; rent—apply. Young America Films, Inc. 18 East 41 St. New York 17, New York.

Dick and Jane visit a country cousin and learn how butter is made. The story interest and rhythmic music hold special appeal for children on the kindergarten-primary grade level.

**SM-324B—Water in the Air.** 10 min. Sale—\$40; rent—apply. Films, Incorporated, 330 West 42 St. New York 18, New York.

Pete and Fred are interrupted in their play by a sudden summer shower. Pete wants to know where all of the rain comes from and how it gets into the sky. His questions are answered by observation and a series of simple experiments which explain the concept of the "water cycle" and the functions of evaporation and condensation.

**BRITISH** Information Services, 30 Rockefeller Plaza, New York 20, New York, offers two films on new British legislation featuring Charley, who represents the average Briton. Sale—\$75 each; rent—\$2.50 each.

**SM-325B—Your Very Good Health.** Charley is shown how the workings of the National Health Service Scheme will effect him and his family. 10 min.

**SM-326B—Charley's March of Time.** How he can avoid the fear of sickness, unemployment, and old age, through the benefits of the National Insurance

Act is explained to Charley in this picture. 9 min.

**SM-327B—Who Will Teach Your Child?** 21 min. Sale—\$85; rent—apply. McGraw-Hill Book Co., Inc. Text-Film Dept. 330 West 42 St. New York 18, New York.

Some of the fundamental issues of teaching as a profession are explored. Questions are posed for community consideration—how to attract people of superior ability to a teaching career, how to train them adequately, and how to keep experienced teachers despite competition from more lucrative careers. The teacher's role in guiding young minds to satisfy their need to know is defined.

**SM-328B—The Tale of the Powdered Pig.** 30 min. Loan. Reynolds Metals Co. Motion Picture Department, 821 So. 12 St. Louisville 1, Kentucky.

Describes the uses to which aluminum powders and pastes are put. The process of converting bauxite into aluminum is described briefly. Laboratory scenes show how new uses for the powder are being discovered. Some scenes were made at the company's mines and alumina plants in Arkansas, others at the plant in Kentucky.

**SM-329B—Wonders in Your Own Back Yard.** 10 min. Sale—\$80, color; \$40, black and white. Churchill-Wexler Film Productions, 137 No. La Brea Ave. Los Angeles 36, Calif. Available on rental basis from film libraries of University of Michigan, Indiana University, and Toledo, Ohio, Public Library.

A boy and girl investigate the small creatures living in their own back yard. Close-up views show how an earthworm, a sow bug, a snail, and a house spider move and act. The size of each is compared with familiar objects. Suitable for children on the primary and elementary age level.

**SM-330B—Salt Lake City.** 12 min. Loan. Film Library, Utah State Department of Publicity and Industrial Development, Room 111 Atlas Bldg. Salt Lake City, Utah.

Development and progress during the hundred years since the city was settled by the Mormon pioneers in 1847 is shown. Scenic attractions, churches, schools, mines, are here.

**SM-331B—Theodore Roosevelt.** 10 min. Sale—\$30; rent—\$3.50. Hoffberg Productions, Inc. 620 Ninth Ave. New York 18, New York.

Highlights in the life of a former American president. Building and opening of the Panama Canal and shots of the Spanish-American War are included.

**SANTA FE** Film Bureau, 80 East Jackson Blvd. Chicago 4, Illinois, presents two films on modern rail transportation. Loan.

**SM-332B—At Your Service.** 25 min. The story of modern freight service, covering the Santa Fe, from its 18-mile beginning in Kansas to its 13,000 miles today. Innovations such as centralized traffic control and radio-telephone are seen in action.

**SM-333B—Along the Santa Fe Trail.** 35 min. The many passenger services are shown. Scenes from Chicago south to the Gulf area, New Mexico, Arizona, California, and the Indian Detour Country, with shots of the Gallup Intertribal Ceremonials, are included.

**SM-334B—It's Your Health.** 18 min. Sale—\$75. Southern California State Dental Association, 903 Crenshaw Blvd. Los Angeles 6, California.

Dr. Hendricks tells Tommy and his friends of the importance of dental health and how dental disease can be controlled. Related in a friendly atmosphere, dentistry for children is shown as a pleasant experience.

This film is suitable for children on the fifth-grade through the high-school level.

**SM-335B—Going Places.** 10 min. Technicolor. Loan. Harding College, Motion Picture Division, Searcy, Arkansas.

Defines the profit motive and explains the part it has played in the economic development of our country. The second in a series of seven films on Americanism.

**SM-336B—For Some Must Watch.** 28 min. Loan. Institute of Life Insurance, 60 East 42 St. New York 17, New York.

Individual problems that face three families in a typical American town are shown in this documentary motion picture. The story tells how they were able to solve their problems through the ownership of life insurance.

**SM-337B—Cyprus Is an Island.** 35 min. Sale—\$73.50; rent—\$6. Films of the Nations, Inc. 55 West 45 St. New York 19, New York.

The history of the island during the past 2000 years is traced. Methods being adopted to tackle the great agricultural and forestry problems are revealed. Cyprus is now part of the British Commonwealth, and under its administration, the Cypriots are rebuilding their despoiled land.

**INTERNATIONAL Film Bureau.** Inc. 6 No. Michigan Blvd. Chicago 2, Illinois, has issued two films on nat-

ural science in Australia. 10 min. each. Sale—\$75 each; rent—apply.

**SM-338B—Bushland Fantasy.** Koalas, kangaroos, platypus, and other animals extinct in other parts of the world, but still surviving in Australia, are seen in action.

**SM-339B—Fine Feathers.** Shows the curious birds which frequent Australia.

**SM-341B—Pacific Halibut Fishing.** 12 min. Color. Loan. Division of Infor-

mation, U. S. Fish and Wildlife Service, Washington 25, D. C.

Follows a typical Seattle halibut schooner on a voyage to fishing grounds in the Gulf of Alaska.

**The Loon's Neuchance.** 1 reel. Sale—\$90; rent—apply. Encyclopaedia Britannica Films, Inc. 1150 Wilmette Ave. Wilmette, Illinois.

Kelora, the blind, old medicine man saves his village from the ravages of

hungry wolves through the use of his sacred collar, magic bow, and sacred songs. His mystical father, the Loon, restores his sight, and in gratitude Kelora gives his collar to the bird.

Actual ceremonial masks from the collection of the National Museum of Canada were used in filming this legend of the British Columbia Indians. Children and adults alike will enjoy this beautiful color film.

(Turn Page)

SM-56B

# Students advance to "Zero"



## Our Audio-Visual Committee

THIS listing of educational films was compiled and edited by Jane Bouneville with the cooperation of the following committee:

**Celia Anderson,**  
New York University Film Library  
**Louise Condit,**  
Metropolitan Junior Museum  
**Leslie E. Fry,**  
Director, Division of Visual Education,  
Cleveland Board of Education  
**Carolyn Gus,**  
Audio-Visual Center,  
Indiana University  
**Gerald D. Cault,**  
Head, Audio-Visual Aids Dept.,  
University of Georgia  
**Nelle Lee Jenkinson,**  
Director, Division of Audio-Visual  
Education, St. Louis Board of Education  
**Dr. Grace Ramsey,**  
American Museum of Natural History  
**Mrs. Esther Speyer,**  
Chairman, Motion Picture Committee,  
United Parents Association  
**Lila Tralinger,**  
Director, Bureau of Audio-Visual  
Instruction, University of Colorado  
**Thurman White,**  
Director, Visual Instruction,  
University of Oklahoma  
**Franklin T. Mathewson,**  
Supervisor, Audio-Visual Education,  
White Plains, New York, Board of Education  
**Herbert R. Jensen,**  
Manager, Columbia University  
Educational Films

THIS MERELY means that home economics students take a constantly growing interest when the subject of food freezing is included in the curriculum.

The Farm and Home Freezer method of food preservation and storage has found itself a definite niche in homemaking. One and one-quarter million American families have installed Electric Farm and Home Freezers during the past three years. The nation's homemakers have discovered that home freezing can mean a wider variety of fresh foods at all seasons of the year . . . time saved because of fewer shopping trips . . . money saved on the budget by freezing home-grown products or foods purchased in season and frozen while plentiful and low price.

To the nation's schools, these facts can mean only one thing—home economics students will want to learn about home freezing, along with canning and other food preservation methods!

And to teach home freezing, your school's home economics laboratory needs several Electric Farm and Home Freezers. This presents no problem. Like the refrigerator, an Electric Farm and Home Freezer is easily and quickly installed. You may have the whole story by getting in touch with your local electric service company or appliance sales organizations.

**What is a Farm and Home Freezer?** "An Electric Farm and Home Freezer is the household type of low-temperature, mechanically refrigerated cabinet used exclusively for the freezing and/or storage of frozen food."

OF COURSE . . . IT'S ELECTRIC!

## A FARM & HOME FREEZER

*Your next "MUST" in Home Economics Equipment*



### FARM & HOME FREEZER SECTION

National Electrical Manufacturers Association, 100 East 44th Street, New York 17, N. Y.

ADMIRAL • BOW-HUB • BISHOP • COOLRATOR • CROSLY • DEEPFREEZE • FRIGIDAIRE • GENERAL ELECTRIC  
GIBSON • HOTPOINT • INTERNATIONAL HARVESTER • KELVINATOR • MORGUE • SAMTARY • SCHAEFER  
SEAGER • STERNHOFF • SUB-ZERO • WESTINGHOUSE • WHITING



## Film Catalogs

**SM-375B—Business-Sponsored Educational Films.** Committee on Consumer Relations in Advertising, Inc. 420 Lexington Ave., New York 17, New York. 58 pages. \$1.50.

More than 1000 motion pictures and slide films are listed. Approximate running time, size of film, whether sound or silent, and source and conditions of availability are given.

**SM-376B—Instructional Materials for the Art Program.** Audio-Visual Education Association of California, 808 No. Spring St. Los Angeles 12, California. 15 pages. 10c.

Films, filmstrips, and Kodachromes dealing with various phases of art, are listed.

**SM-377B—Films by Coronet.** Coronet Films, Coronet Bldg. Chicago 1, Illinois. 32 pages. Free.

Films for the entire school curriculum are listed here.

**SM-378B—1948-1949 Catalog.** Johnson Hunt Productions, 1133 No. Highland Ave., Hollywood 38, California. 6 pages. Free.

Educational films and filmstrips.

**WE NEED 1,000,000 registered apprentices and have only 350,000,** says the U.S. Labor Department.

SM-37B



Desk top at 20° slope for reading, writing, drawing

## ANNOUNCING THE "Ten-Twenty"

### AMERICAN UNIVERSAL DESK



Top level for manipulative work



Top at conventional 10° slope



Top raised for easy access to book box

Here is our latest contribution toward co-ordinated classroom environment—designed to accepted principles of visual and postural environment being planned by leading school authorities.

It offers, for the first time, a choice of 20° slope, 10° slope, or level desk top to meet all needs. New exclusive fore-and-aft seat adjustment functions at will of pupil, stopping smoothly and quietly at any position. Provides perfect focal accommodation for all work on desk top in each use position. Vision is further safeguarded by 30% to 35% reflectance of desk top's durably lacquered natural-wood finish. The new "Ten-Twenty" includes all the features that have made American Universal Desks famous. Write for complete details!

**FREE:** Write for the new booklet, "The Co-ordinated Classroom" by Darell Boyd Harmon, and "Progress Toward Improved Classroom Environment."

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SM-58B

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SM-59B



*First Aid  
Movie  
for Free  
Showings*

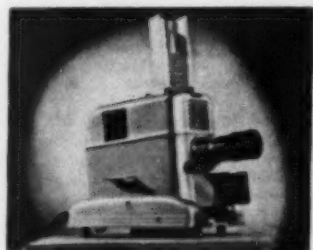
The basic principles of First Aid are portrayed in Johnson & Johnson's film "Help Wanted." This 16-mm sound picture contains interesting and important information. Thirty minutes of realism.

If you want to give a showing to groups interested in First Aid, send the coupon below. No charge, except you pay the return postage for the film.

**Johnson & Johnson**

JOHNSON & JOHNSON  
Dept. "E," New Brunswick, N.J. (R)  
Please send me information on the Motion Picture  
"HELP WANTED."

NAME.....  
Address.....  
City..... State.....



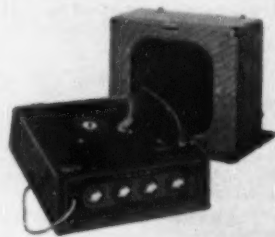
**SM-422B Slide Projector**

Feeding, changing, and restacking of slides is automatic and in perfect sequence in the new La Belle automatic slide projector. The push button operation releases each slide into a special chamber where it is prewarmed to prevent buckling and out-of-focus images. Slides remain free of fingerprints and scratches, since they are not handled, once arranged. A shutter blocks out picture on the screen when slides are changed, and a new view quickly appears.

This machine handles 75 ready mounts or 35 glass slides in its metal magazine clip. The carrying case has a screen in its detachable, stand-up cover.

**SM-423B Short-Reel Recording Tape**

For the many school uses which require a short-playing reel, Minnesota Mining and Manufacturing Company makes a 150-foot-long, Scotch sound-recording tape. It provides 3 minutes of playing time on conventional recorders and 12 minutes on dual track recorders. Tape comes with either paper or plastic backing.



**SM-424B Record Player**

All types of records and transcriptions can be played on the Newcomb portable TR16B record player which is combined with a public address system. Speeds are 78, 45, or 33 1/3 r.p.m. for both broadcast-type transcriptions and L.P. Microgroove records. An input for microphone with separate microphone and phonograph controls permits mixing of speech with records, or use of each alone.

Machine has a constant-speed rim drive motor for "wow"-free performance.

**SM-60B**



COLORS  
BRUSHES  
ARTISTS MATERIAL

**M. GRUMBACHER**

ance. There are individual bass and high frequency tone controls. The 12-inch Alnico V, permanent magnet dynamic speaker has 25-foot cable for best placement.

#### SM-425B

#### Tape Recorder

High-fidelity recording can be obtained from the Tapetone magnetic tape sound recorder, previously available only in self-assembly kit form. Machine records everything from your own voice via the crystal microphone to full radio programs either  $\frac{1}{2}$  or 1 hour in length. A built-in turntable permits recording from regular phonograph discs to the tape.

The Scotch recording tape is easy to edit and title because only one edge of tape is employed. A newly developed, slow-speed capstan supplies the extra  $\frac{1}{4}$  hour on standard-length tape. Playback is through a high-quality, 8-inch speaker. The rugged Tapetone can also be used as a public address system or record player.

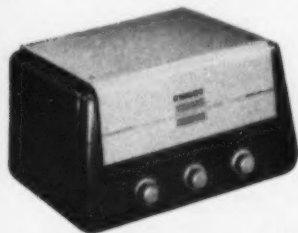


#### SM-425B

#### Console Phonograph

Excellent for both auditorium and for classroom use is the console model SC-1 Audio-Aid phonograph made by the Arthur Ansley Manufacturing Company. It can play at 78, 45, or 33  $\frac{1}{2}$  r.p.m. and handle all types of records and 16-inch transcriptions. Provision is made for use of a microphone and external speaker or headphones. A wire recorder and an FM-AM tuner are optional equipment.

All controls are located on convenient sloping panel. Rubber casters provide easy movement. This high-fidelity instrument has a 15-watt triode amplifier and heavy dual coaxial speakers.



#### SM-427B

#### High-Fidelity Amplifier

An improved model of the Knight 20-watt, high-fidelity amplifier is manufactured by the Allied Radio Corporation. It reproduces from records, tuner, or microphone. It can be used to record from mike, radio, or records.

Amplifier has wide range response, less than 2 percent distortion at full output, and hum 80 db below rated output. A built-in, equalized preamplifier permits the playing of records from any variable reluctance or new-type magnetic cartridge. There are separate bass and treble tone controls, and 5 speaker output impedances.

### New Television Set in School Test

THE first school test recently of the Ansley Tele-Movie at the Stony Brook Boys School, Stony Brook, Long Island, New York, was reported a tremendous success under exacting conditions.

Tele-Movie is the new concept in television which projects a life-size image on a screen, visible from distances and from acute angles. The Stony Brook

demonstration was conducted in the auditorium of the school where 700 people gathered. Tele-Movie brought to the rally a program emanating 70 miles away. Every member of the large audience reported seeing and hearing the program perfectly.

The Tele-Movie mahogany cabinet measures 23" high, 21" wide, 26" long. Small panels in front open to reveal the

Projec-Tel unit which was invented by Philips in Holland this spring.

The image is projected onto the screen which, for best results, is placed six to eight feet from the cabinet, producing a picture three by four feet. It can be viewed from a 30-degree angle. The picture is brighter than that obtained with 16 mm. film. Since one looks at reflected light, there is none of the eye-strain inherent in looking directly into the conventional television screen.

SM-41B



# NEW LOW PRICE

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### LIGHTWEIGHT, SINGLE-CASE

# FILMOSOUND

NOW more than ever—your best buy in audio-visual equipment

NEW LOW PRICE **\$399.50** including 6" speaker

CONSULT YOUR NEARBY BELL & HOWELL EDUCATIONAL REPRESENTATIVE—HE IS SPECIALLY TRAINED TO SERVE YOU

Ask for his assistance—in any audio-visual problem—without obligation. Many of our representatives are former school administrators who understand school problems thoroughly. If you do not have the name of our representative nearest you, write Bell & Howell Company, 7123 McCormick Road, Chicago 45.

#### NEW ACADEMY FILMOSOUND

— for larger Audiences, Indoors and Out

Designed to give you the utmost flexibility in sound or silent 16mm projection. Has a separate speaker—8", 12", or 25-watt power unit, as required. Theater-quality sound and picture brilliance. Now, with 8" speaker, only \$474.50

PRECISION-MADE by



Now, to its proved advantages in performance, film protection, and dependability, the Single-Case Filmosound adds a new low price . . . to make this 16mm sound (and silent) projector more than ever your best buy.

In a single, lightweight case—it weighs only 35  $\frac{1}{2}$  lb. including built-in speaker—Filmosound is ideal for classroom use. Students can quickly and safely learn its simple, foolproof operating routine. Error-proof threading, plus "floating film" construction, makes film damage virtually impossible. The B&H pre-aligned optical system utilizes all the light available, gives you full picture brilliance.

**PROOF OF DEPENDABILITY.** Taken at random from stock, projecting film under normal conditions, a B&H Filmosound is in operation in our laboratory. It has now run 1600 hours with no time lost for repairs. No wonder so many schools and colleges have long preferred Bell & Howell audio-visual equipment!

Bell & Howell Cameras and Projectors are

**GUARANTEED FOR LIFE!**

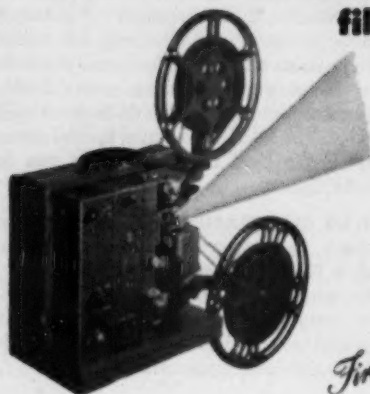
Filmosounds will give trouble-free service. During life of product, any defects in workmanship or material will be remedied free (except transportation).

## TEXTURE Makes The Scene Look Real



## MOVIES HAVE CONVICTION when your 16mm films are projected with the

# RCA "400"



YOU SEE the soft, smooth skin of a child, the hard, weather-beaten structure of a sidewalk appear on the screen with dramatic realism and improved contrast when the scene is projected with the RCA "400".

That's because your black-and-white or full-color films are shown in their full range of tones from delicate highlights to deep shadows—with texture that's unmistakably true as life. It's another proof of the superior quality of RCA "400" projection.

And, in addition, the RCA "400" gives you

the benefits of easy threading... greater simplicity of operation... maximum protection to your valuable films... reliable performance.

See your 16mm sound or silent films at their brilliant best. Hear voices, music or sound effects reproduced with life-like fidelity. Compare and buy the RCA "400".

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RCA "400" JUNIOR. The only single-reel standard 16mm sound projector of fully professional quality.

RCA "400" SENIOR. Provides finest-quality reproduction of 16mm sound and pictures for larger audiences, auditoriums or larger rooms.

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Please send me complete information on the RCA "400" Sound Projector.

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Street

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